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ABSTRACT

This book, comprising seven chapters, describes the TTT (Trainers of Teacher Trainers) program at the national and local levels, discusses some concerns of the program, and describes the impact of the program on individuals and institutions. Chapter 1 provides background information, including definitions and a review of TTT at the national and local levels. Chapter 2 discusses the development of the national program and identifies its impact on one local project. Chapter 3 considers the Indiana Project in some detail and examines process and program dimensions, reporting on failures as well as successes. Chapter 4 discusses the issues and problems that arose in the implementation of the local projects and indicates the strategies employed for dealing with them. Chapter 5 and 6 report the results of the program in individual and institutional terms. Chapter 7 offers recommendations to federal agency personnel, local project personnel, and other local agency personnel for the planning, funding, and conduct of experimental field-based programs in teacher education. A 15-item bibliography is included. (Authors/PD)

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Stirrings in Teacher Education

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Indiana TTT

Indiana University
School of Education
Division of Teacher Education

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Acknowledgement

This acknowledgment will be brief. Its purpose is to offer our sincere thanks to those who participated with us in the TTT Program. Because of their numbers and because so many held important leadership roles in TTT, it is impossible at this point to acknowledge them individually, as we would like to do. Their names are included in the Appendix. If anyone's name has been omitted, please accept our apology and be assured that the omission was inadvertent.

In addition to those who were active participants in TTT (as trainers and trainees), many other persons in the institutions involved, both administrators and faculty, lent their support and cooperation in the planning and implementation of the Program. Without such support, TTT would not have flourished nearly as well as it did. These persons have also been remembered in the Appendix.

Finally, the authors must acknowledge responsibility for this publication. While we believe most of the TTT participants would concur with much if not all of what has been said, it was impossible to obtain the participation of so many in any meaningful way. At one time, we had hoped to have all the parity groups represented in the writing, but for various reasons that did not happen. As a result, this publication has its limitations. It represents the views of a small group of university-oriented persons whose perspective is largely that of professionals in teacher education. While our insights have certainly been sharpened by the observations of others offered in many forms, we must assume full responsibility for the comments and judgments found in this book.

The Authors
January 24, 1974

The authors

Gerald R. Smith has held a wide variety of positions in education. He has taught at every level from eighth grade through graduate school in such fields as English, personnel management, educational research, educational administration, teacher education, and alternative schools. His administrative experience includes positions as a director or associate director of planning groups, curriculum development efforts, faculty training programs, and teacher education programs, and he has held administrative positions with the Office of Education (HEW) and two universities. He has conducted research and development activities in a number of areas and has served as a consultant to public schools, publishers, private firms, the U. S. Government, and other groups. He has published widely in book, monograph, and article form.

In January, 1968, Dr. Smith, who earned his doctorate at Teachers College, Columbia University, became director of the Center for Innovation in Teacher Education, a research and development facility within the School of Education at Indiana University. He was a member of the initial task force which planned the TTT Program and has served as director of the Program from its inception.

Jerome C. Harste, a graduate of the University of Minnesota, joined Indiana University as a curriculum materials developer in reading and language arts teacher education in 1971. Dr. Harste assumed Co-Directorship of Project RELATE, a competency-based teacher education curriculum in reading/language arts after his one-year involvement with the Professional-Year Program. Many experiences within Project RELATE had their genesis in Dr. Harste's experiences with the Professional-Year Program.

While Dr. Harste's primary professional objective remains curriculum development and materials development for the preparation of elementary classroom teachers in the areas of reading and language arts education, other professional interests include teacher education program evaluation, in-service teacher education program development and alternative teacher education program development.

Dr. Harste is an active participant in several professional organizations including the American Educational Research Association, The Association of Supervision and Curriculum Development and the International Reading Association. He is currently co-chairing a regional conference on "Mainstreaming" sponsored jointly by the Division of Teacher Education at Indiana University and the State Councils for Exceptional Children in Indiana, Ohio, Michigan, Kentucky, Missouri, and West Virginia.

In addition to the RELATE materials which include two student guides, one instructor's manual, and 51 media components, Dr. Harste is author of several professional articles, the most recent of which have appeared in the *Florida Reading Quarterly*, *Journal of Research and Development in Education*, and *Educational Leadership*.

James M. Mahan began his professional career in 1954 as a teacher of high school mathematics in North Carolina. He served as a teacher and a counselor in both North Carolina and New York before assuming principalships at the elementary, junior high, and senior high levels. After completing a doctorate in Educational Administration, Dr. Mahan became director of the Process Curriculum Installation Program of the Eastern Regional Institute for Education. For three years he was engaged in the installation, demonstration, and evaluation of curricular innovations in a network of over 60 schools in New York and Pennsylvania.

His change agent work with principals, teachers, university consultants, and state education department officials undergirded a strong commitment to field-based programs for those seeking to increase their teaching skills. From 1970 to present, Dr. Mahan has directed and instructed in the Professional-Year Component of the Indiana TTT Program. Interactions with TTT personnel and spin-off effects of TTT guidelines and philosophy led him to develop student teaching and community agency internship projects in Native American and Latino settings.

James M. Clark, Visiting Assistant Professor, Division of Teacher Education, has been associated with the Indiana University TTT Project and successive programs since 1970. Before joining the TTT staff, he was a member of the Dean of Students staff at Indiana University for three years and pursued post graduate work in secondary education. Mr. Clark has received his Bachelor's and Master's degrees from Miami University, Oxford, Ohio, where he also served as Assistant Dean of Men for two years. He has taught in the Ohio public schools.

Robert McGinty is an Associate Professor in the Mathematics Department at Northern Michigan University where he works with preservice elementary teachers. Previous teaching experience included four years of public school teaching in Saginaw Township Schools, Saginaw, Michigan; one year at Michigan State University which included teaching in the Leadership Conference; and one year as a Visiting Lecturer at Indiana University working with the TTT Project. In addition, he has taught for The Madison Project in New York, Florida, and California and was an instructor in The Specialized Teacher Project for the State of California.

Dr. McGinty received his Ph.D. and B.S. from Michigan State University and his M.A. from Western Michigan University. In addition he has attended institutes at Michigan State University, Western Washington State College, University of Illinois, and Columbia University. He has been a speaker at local, state, regional, and national mathematics conferences as well as a member of several professional organizations. He has been the author and co-author of several journal publications and is a Departmental Editor of *School Science and Mathematics.*

Stanley S. Shimer began his professional career as a teacher of junior and senior high school science and physical education at Marion and Crawfordsville, Indiana. He also served as a supervising teacher for students from several Indiana universities. In addition, he coached football, wrestling, and directed intramural programs. For two years he worked at the elementary level. He has served eight additional years as a college supervisor for several hundred elementary and secondary student teachers and has taught both undergraduate and graduate science education courses, workshops, and seminars at Indiana State University. From 1970 to 1972, Assistant Professor Shimer coordinated the TTT science component of the Professional-Year Program at Indiana University. The contribution to this publication was a result of Shimer's experiences with the TTT Project.

1 Introduction

When the manuscript for this book had been completed, the authors felt that a brief chapter was needed at the beginning to provide some background and set the stage for the remainder of the book. Specifically, it would (1) define some of the unique terms that are used throughout the book, (2) provide a quick review of TTT at the national and local levels, and (3) encapsulate the remaining chapters of the book. In sum, its purpose then and now is to give the reader a running start in dealing with the TTT ideas and activities presented in this book.

The TTT Program originated at the national level as one of ten programs administered by the Office of Education under authorization from the Education Professions Development Act (EPDA) enacted by the Congress in 1967. The primary focus of TTT was the improvement of teacher education. The precise meaning of the TTT acronym was never completely clear but the major variations in meaning, if we can call them that, are *Training* of Teacher Trainers and *Trainers* of Teacher Trainers. Later in the book we discuss the shifts in meaning and their significance to local project personnel. For now, it is sufficient for the reader to understand that the main thrust of TTT was focused on teacher education personnel rather than on the pre-service and in-service personnel they trained. In TTT terminology the undergraduate students are teachers in training or T's; the graduate students and public school teachers who serve as supervising teachers are teacher trainers or TT's, and university graduate professors, superintendents, deans, and other school and university administrators are trainers of teacher trainers or TTT's. Community persons could be anything from TTT's (or even TTTT's) to minus T's or paraprofessionals in training.

One of the central ideas of the national TTT Program was a principle known as "parity." Parity required equal or near equal involvement from the School of Education, the College of Arts and Sciences, the public schools and the community in the planning and conduct of a local project. In some contexts, a fifth group, the students enrolled in TTT programs, were also given parity status. What parity meant or could mean in actual practice was determined by each local project as it attempted to forge a viable amalgamation of these groups.

The national TTT Program struck an interesting balance between providing direction and guidelines on the one hand and permitting local discretion, flexibility, and choice on the other. It evolved a number of guidelines and emphasized certain ideas in keeping with its belief about how significant change was to be brought about in teacher education. Parity has already been mentioned as one of the cornerstones of the national program. Another guideline was providing better service to populations least well served in the past. Included were urban dwellers, low-income families, blacks, Chicanos, native Americans and other minority groups, poor rural whites such as those found in Appalachia, and similar groups. The national program also emphasized institutional change. It expected proposals and programs to develop strategies for bringing about institutional change in the hope that improvements would remain relatively permanent and stimulate similar developments in other institutions. It encouraged the institutionalization of "proven" programs and based some of its funding decisions on movement in this direction. At the individual change level, it established TTT gatekeepers as one of the prime targets of change and expected programs to have spinoff or multiplier effects as a result of this and other guidelines.

The national program established a wide variety of means to achieve its ends. The Leadership Training Institute (LTI) was a group of professional and nonprofessional advisors established to provide consultation on policy matters and to perform several other functions. The national TTT staff also initiated a conference or workshop program, developed regional groupings of projects called clusters and contracted for several evaluation efforts.

The Indiana TTT Project grew out of a proposal submitted in June 1968. It was a decentralized project from its inception, operating as many as six major programs during its most active years. These programs are described briefly below so that you will know them when you encounter them later in more detail.

Professional-Year Program As its title implies, the Professional-Year Program was a field-based program covering one year in elementary school settings. It was designed to provide greater reality orientation to methods professors and graduate student interns, to integrate methods instruction and student teaching, to upgrade the supervisory skills of public school supervising teachers and to provide a more integrated, comprehensive program for undergraduate majors in elementary education. It was the largest Indiana program in both numbers involved and resources expended.

Community Involvement Program This program represented an effort to stimulate greater involvement of community persons in teacher education through training sessions, seminars, class presentations, field experiences and similar devices. It provided inputs to the "regular" teacher education program at Indiana as well as to other TTT programs such as Professional-Year and Urban Education. Agency personnel and private citizens participated in small town (Bloomington) and large city (Indianapolis) settings.

Urban Education Program The Urban Education Program, based in Indianapolis, consisted of three separate though interwoven strands of activity. One of these was a week-long program of visitation and observation in inner city schools and agencies each semester. While it was designed primarily for Professional-Year staff and students, it served other groups as well. The Urban College Weekend provided a weekend live-in experience for professors, graduate students, public school teachers, Bloomington residents, and undergraduate students designed to expose them to the urban culture through a variety of activities. Except for a few "scholarships" each participant paid his own way. The Urban Semester Program combined student teaching with work experience in social agencies for elementary and secondary majors in education. It also provided similar experiences in social agencies for students in Arts and Sciences. The students lived in the inner city, took part in a special academic program, and participated in a variety of exposure experiences as well. Both the Urban College Weekend and the Urban Semester Program were carried out in part through a subcontract with Flanner House, a social service agency in Indianapolis.

Multiple Arts Program The Multiple Arts Program was a cooperative effort between the School of Music, the School of Health, Physical Education, and Recreation, Art Education in the School of Education, and the Monroe County Community Schools.* It provided graduate training for specialists in an integrated, creative-concept approach to the teaching of music, art, and movement in elementary schools. It used some of the same schools as the Professional-Year Program.

Secondary Mathematics Program This program, one of the first two implemented in 1969, involved two university professors from the Mathematics Department in the College of Arts and Sciences, a professor and graduate students in Mathematics Education and secondary school teachers of mathematics in Monroe County Community Schools. It involved a revision of the geometry courses offered in Mathematics, concurrent revision of mathematics methods and an integrated program of content, methods, and student teaching for undergraduate students. All of the groups worked closely together on all phases of the project.

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*What was the Bloomington Metropolitan School System when the project started became the Monroe County Community School Corporation shortly afterward. We will make use of the latter terminology throughout.

Early Experience Program "Early experience" referred to the need of undergraduates to acquire firsthand experience in schools and other settings well in advance of student teaching. It was assumed that such experiences would provide a more adequate basis for deciding whether to teach or not and if so, to enter student teaching with even greater commitment. Professors and graduate students in education, public school teachers, and community persons participated in the development and implementation of the field experiences comprising this program. These six programs constituted the major programmatic thrust for the Indiana TTT Project. All but one of them continue to this day in partially or wholly institutionalized form.

Having described the TTT Program at both national and local levels, all that remains is a brief overview of the rest of the book. Chapter II discusses the development of the national program in some detail and identifies its impact on one local project. It is controversial to the extent that it examines the negative as well as the positive aspects of the national program's role.

The third chapter considers the Indiana Project in some detail. It examines both process and program dimensions and reports our failures as well as our successes.

The fourth chapter is devoted entirely to the issues and problems that arose in the implementation of the local project. It discusses these problems and issues in realistic terms and indicates the strategies we employed for dealing with them. Illustrations are presented from the Professional-Year Program. Persons contemplating the initiation of experimental programs would be wise to anticipate some of these concerns in advance of implementation.

Chapters V and VI report the results of the program—five, in individual terms and six, in institutional terms. Five relies heavily on actual data gathered during the program, largely from Professional-Year while six makes use of a wider variety of data collected in a more informal way. All things considered, we think the results are significant and do offer evidence of lasting changes.

The last chapter offers our recommendations to federal agency personnel, local project personnel, and to other local agency personnel for the planning, funding, and conduct of experimental field-based programs in teacher education. The recommendations are designed to deal with many of the issues that are likely to arise in the implementation of such programs. In our opinion, if they are followed, all of the parties will be more likely to achieve their objectives with the result that stronger programs in teacher education will emerge.

5/6

II National TTT Program

On June 29, 1967, President Johnson signed into law an act entitled the Education Professions Development Act (EPDA). This act consolidated many programs that were being carried out under previous legislation and added some new ones, particularly in the field of teacher education. It included an extension of the Teacher Corps and Title V of the Higher Education Act of 1965. Under EPDA, ten separate programs, of which TTT was but one, were initiated or continued. In ensuing years, some of the programs were dropped or consolidated with others when funds were reduced.

Most of us became aware of the TTT Program in the early months of 1968 though guidelines were not distributed in tentative form until March 1 and in final form, until March 15, 1968. Proposals were due on June 1–three months from the date of the first unoffical announcement.

The national program, conceived and implemented as a five-stage effort,[1] began with a planning session in Chicago on October 6, 1967. The conferees consisted of the deans of liberal arts colleges and education from four universities selected to serve as host institutions in their respective geographical areas, consultants drawn from public schools and higher education, and members of the Office of Education staff.

During stage two, a series of planning and evaluation conferences were held at four universities: The University of Georgia, the University of California at Los Angeles, Michigan State University, and Hunter College of the City University of New York. The first of these was held at the University of Georgia in early December 1967. It was designed to acquaint individuals and groups with the TTT Program, to establish guidelines, to begin the formation of teams of individuals who would develop proposals for each project, and to develop plans for the institutes which were to be conducted during stage three. Each university also held a week-long institute during stage three. These took place in January and February 1968. The purpose of each was to assist teams in preparing detailed plans for proposals by the end of May.

The institute attended by the Indiana* team was held at Michigan State University on February 26 to 29. Four purposes were identified in the materials that were distributed: "1) to translate the guidelines into their own relevancies, 2) to define the major problems all trainers of teacher trainers face, 3) to improve relationships and communications among the various groups concerned with teacher training, and 4) to focus upon the here and now, the present situation, what is known, and what might be done about it."[2]

Stage four was to be the period between the end of February and June 1 when the task forces at each location were to produce plans or proposals based upon an assessment of their educational resources and outlining a unified approach to the problems of teacher education that were identified. According to the Michigan State document referred to earlier (1-5-68), "All projects must display some sense of the total problem and present some plan that involves all sectors of the educational community in all phases of the problem: preservice, undergraduate, graduate, inservice, theory and practice, subject matter, materials, and methods."[3] As you can see, the plan was to represent no small accomplishment on the part of the task force.

Stage five began after the projects were chosen for funding and operational programs were implemented. For most projects, this period began from December of 1968 to July of 1969 and ended at various points from one to five years later.

During the period when projects were in operation, the national TTT Program personnel did five things to be of service.

They developed and articulated a content and thrust for the national TTT Program.
They established the Leadership Training Institute (LTI).
They held national conferences at regular intervals.
They established regional groups of TTT projects called "clusters."
They developed a national program of evaluation.

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*The reader will note that the name of the project does not include university, school or any other institution. That was a deliberate choice on our part feeling that Indiana indicated its location (there was only one TTT project in Indiana) and that it was our intention to have a variety of groups involved not only from the schools, university, and community at Bloomington but in other parts of the state as well. Since one of our most interesting programs evolved in Indianapolis, we did follow through on that intention.

Content and Thrust of National TTT Program

During the first year of the national TTT Program, it was difficult for persons in the profession to understand what the Office of Education was trying to achieve through the program. The guidelines, distributed in tentative form on March 1, 1968, covered a single sheet of paper on both sides. When they appeared in final form on March 15, they were essentially the same. This sheet of guidelines provided the following information:

It identified 1967 as the starting year and estimated that $600,000 would be used for the first stage of the project prior to July 1, 1968.

It described the formation of the task forces and the orientation meetings for them and identified the purpose of each task force as the design of individual projects.

It stated that the central purpose of TTT was ". . . to test the hypothesis that the schools of this country can combine *on equal terms** with the colleges and universities to create viable programs for training teachers of teachers, whether these latter are experienced school personnel, graduate students, or teacher-aides."[4]

It set forth the assumption that both the academic and professional disciplines from the university, personnel from the schools, and representatives from communities would be involved in the work of the teams.

It identified the following responsibilities for local teams or task forces: designing methods for accurately assessing local needs and priorities; relating local needs, when appropriate, to national needs; selecting clientele to be served; determining resources; and outlining the logistics for carrying out the proposed program.

It established the following "mandate" for each project: ". . . to assemble the professions and create the devices that will bring together in parity—the schools and the *whole** university in order to coordinate the several components involved in the training of educational personnel."[5]

In summary, the announcement did use the word parity—a word that was to be heard frequently in TTT circles from then on. It did make reference to all of the parity groups being involved although the mandate to coordinate the training was given only to schools and universities. While it also said that community representatives would participate on the local teams, this appeared to have been thinking that emerged from the meetings rather than a description of the makeup of the teams. A roster of team participants who attended the Michigan State meeting reveals no community representatives with perhaps one exception, whose affiliation was not recorded. If the Office of Education and Michigan State University really had this in mind before teams were formed, they did not make it clear to the participating teams, at least not to the teams participating at Michigan State.

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*Underlining appeared in the original announcement.

Fuller descriptions of TTT did not appear until over a year later. A document entitled, "Education Professions Development Act–Program Information–Trainers of Teacher Trainers Program," was distributed to the directors of projects in July 1969. It provided background on EPDA and identified program commitments and priorities for the act as a whole. It also provided details on the TTT Program. This material did not depart a great deal from the material distributed the year before. It did place slightly more emphasis on institutional change and on the concept of gatekeepers, ". . . change agents who as the anonymous but nonetheless real teachers of teacher trainers, have the desire and power to bring into effect such reforms previous experience had shown to be necessary."[6] It reiterated concepts such as parity involvement, the integration of preservice and inservice programs, and the TTT focus, which now read "*teachers* of teacher trainers" rather than "*training* of teacher trainers." Finally, it made a reference to disadvantaged and minority groups, which, while brief, was a sign of directions to come. The remainder of the document was spent describing the procedures for preparing and submitting proposals. A note on the last page announced the establishment of a Leadership Training Institute (LTI) for each of the ten EPDA programs and the appointment of Harry Rivlin, Dean of the School of Education at Fordham University, to serve as director of the LTI for the TTT Program.

A document distributed in the fall of 1970 provided the most complete description of the national TTT Program. It identified five guidelines for the design of TTT projects:

> The focus of the project must be on the identification, recruitment, and training of TTT's.
>
> TTT projects must insure a balance among the consumers and producers concerned with the training of educational personnel.
>
> Because TTT projects are directed at educational reform, they should consider and include the best of recent educational developments and focus on the most critical of current educational issues.

Improvements resulting from the projects should be institutionalized—that is, become a part of the system for preparing trainers and teachers.

Since the TTT is a demonstration program, each program should develop strategies to achieve a maximum multiplier effect.[7]

The first two items are restatements of similar themes in previous years, but a critical shift had taken place in each of them. In item one, the focus, described initially as the *training* of teacher trainers, had shifted by the second year to *teachers* of teacher trainers and by the third year to a nearly exclusive emphasis on the training of TTT's. This is underscored by the following statement. "TTT projects may include TT's, T's, students, and aides when their participation is a means to the goal of training TTT's."[8] This is quite a different statement from the one that appeared in the March 1968 announcement. It read: "Such programs-to-be include the preparation of teachers of teachers for the colleges and universities, for the schools, and at either the preservice or inservice level, or both."[9] While such shifts in emphasis may appear subtle in print, they have a considerable impact when translated into practice, particularly for projects that began with one mix of participants only to find that such a mix was not completely acceptable by the second or third year.

A similar difficulty occurred with item two. What began as a vague reference to community participants in 1968 was eventually spelled out in considerable detail in 1970. "There are at least three kinds of community participants," the '70 document said. They are: national resource persons who have expertise in the problems of children from low socioeconomic backgrounds, local resource persons who live in the school communities used by the training projects, and individuals living in communities from which they will return."[10] The example given is particularly enlightening:

> For example, a TTT participant receives his training in Alaska and returns to his University in Delaware to develop new and improved training programs. The legitimacy of these programs must be tested in Delaware, not Alaska.[11]

The document never addressed the question of how the latter was to be accomplished. One other shift was occurring in the community theme. While original references were to community representatives, later ones specified low-income, disadvantaged, and minority communities. "It is suggested (but in no sense required) that TTT projects give priority to this critical issue"[12] (of involving low income minority group persons).

Lest we be misunderstood, let us make one point clear. We approve and applaud the efforts of the Office of Education to evolve its program at the national level. There are many examples of national programs that are established in final form before they begin and that never learn from the ongoing process in which they are involved. This was not the case with the TTT Program and we would not want it otherwise. But it is an inescapable fact that the evolution of the national program posed problems—sometime serious ones—for local projects. It meant a continual attempt on the part of local personnel to adjust to the latest shifts and refinements of the Office of Education policy. Given sufficient time, adjustment may not have been particularly difficult or traumatic—but we were seldom afforded the luxury of time. Guidelines would arrive and proposals would be due a short time afterward. Dropping a set of persons you have established relations with and establishing relations with a new set goes far beyond writing it down in a proposal. One year's lead time is a minimal period for shifts of this magnitude. Yet, the Office of Education seemed to expect the shifts to occur almost immediately as if local project staffs should have been able to anticipate its moves. In retrospect, one can see the beginnings of some shifts, but their significance was overlooked in the hurly burly of being there.

Such shifts in policy and direction need to be encouraged at the national level, but national planners should also be aware of how important it is to 1) announce such shifts well in advance of the expected timing, 2) provide as much information as possible before, during, and after the shift, 3) involve representatives from the projects in the making of such decisions, and 4) understand that announcing such shifts is considerably easier than carrying them out. Perhaps Office of Education personnel feel they did each of these things in the development of new policies and directions. If they did, their efforts provide further evidence of how difficult the task really is. At Indiana, we were often one year out of phase with the national program. When they were emphasizing community involvement, we had not begun our community program, and when they had embarked on the "year of the liberal arts," we were just getting our community involved. It was reasonable for them to exercise a leadership role at the national level. In the future, a minimum of one year's lead time should be allowed to enable local projects to learn clearly and precisely what is expected, to work out appropriate plans to proceed, and to evolve the necessary working relationships to proceed in effective fashion.

Leadership Training Institute (TTT)[13]

The Leadership Training Institute, directed by Dean Harry Rivlin of Fordham University, was a group of people of varying backgrounds—though most were professional educators or connected with education in some way. It was established by the Bureau of Educational Personnel Development, the agency in charge of the TTT Program in the Office of Education, with the dual responsibility of advising the Bureau on various aspects of the program and of developing a close working relationship with project directors and cluster leaders. Thus, its role was a fairly complex one from the beginning and included 1) coordinating all of the projects to represent a unified national thrust, 2) assisting planning projects to develop full scale operational programs; 3) identifying implementation problems that might be examined through conferences or other means, 4) visiting operational programs in order to be of assistance to the directors, 5) organizing workshops in response to the expressed needs of directors, 6) summarizing and disseminating promising practices and programs, 7) preparing position papers on topics of interest, and 8) generally serving as liaison between the Office of Education on the one hand and project and cluster personnel on the other. The one thing they were *not* to do as a group was to make evaluations of individual projects that would be reflected in funding decisions. In other words, Office of Education personnel wisely chose to separate the provision of assistance to projects through the LTI and the provision of funds through other channels. Whether such a separation was actually made in practice is a question needing further examination, and we shall do that at a later time.

Conferences

A number of conferences or workshops*, as they were called by the Office of Education, were held each year through the auspices of the LTI, the clusters, and the national program itself. Since there were a considerable number of such conferences over the five-year period in which the national program was in operation, it would take far too long to try to examine each of them in any detail. Instead, various types of conferences will be described and reactions provided to the conference program as a whole.

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*Office of Education personnel made a fine distinction between conferences and workshops. The reason for the distinction was never very clear, but it appeared to reflect some sort of budgetary restrictions. Apparently, the Office had a wider range of funds available for workshops than it did for conference purposes. Our use of the word conference is a matter of convenience rather than one of defining any specific set of activities.

Orientation Conferences These conferences were held in early spring of 1968 and have already been described in detail elsewhere. Their general purpose was to provide program information and to develop task force teams which were capable of submitting plans within the TTT guidelines.

Directors' Conferences Conferences specifically held for directors and sometimes one or two other key personnel (e.g., evaluation personnel) took a number of forms. Some of them were simply informational, describing the next steps to be taken to resubmit proposals or providing awareness of some impending changes in policies or procedures. Some of them were strictly problem sharing meetings during which common problems were discussed and ways of resolving them were suggested.

Evaluation Conferences These conferences, more like workshops than some of the others, usually provided specific information about evaluation procedures to be used by the Office of Education. They were held at a number of sites and were sponsored by one or two clusters. Some of them dealt with the demographic data to be requested by the Office and by the Department of Health, Education, and Welfare. Others focused on site visits, described the purposes behind such visits, and indicated the teams that would be visiting each institution. Still others described major evaluation programs which had been subcontracted to agencies outside the Office of Education. At least one of these programs called for a very extensive set of data on the objectives and activities of the program and also on its results. Local plans for evaluation usually were discussed through the directors' conferences.

Topical Conferences A number of conferences were held around major topics such as the place of the liberal arts in the training of teachers, the development of parity participation by all of the groups concerned, the place of the public schools in the development of teachers, the value of cultural pluralism, and similar topics.

Problem Oriented Conferences We have already pointed out that some of the directors' conferences were oriented toward the resolution of problems, but these were generally given for directors and a small number of key personnel. In addition, there were some problem oriented conferences in which directors were to bring a wide mix of project participants with them. Sometimes these dealt with a specific concern such as achieving community involvement or developing parity in the implementation of a program, and sometimes they were more free-wheeling, covering whatever problems seem to emerge from the group.

The conferences were generally held by a single cluster or two clusters working together with additional support, either financial or moral, from the Office of Education. Sometimes they were designed and implemented by consultants employed by the Office for a specific task. A good example of this type was the series of conferences developed and carried out by Malcolm Provus and his colleagues to describe the evaluation program which they had designed for the Office. Except for the orientation seminars, the conferences were rarely held by individual projects or institutions, although single projects often served as hosts. Usually, the types of persons to attend were recommended or completely specified in advance. This was done to assure the participation of all of the parity groups and program levels at one conference or another.

As one might expect, the quality varied widely from conference to conference. Some seemed to be established on the principle that preparation and structure, however loose, were tantamount to heresy. Others were overstructured to the point of not being able to get all the presentations in because someone had taken too long in making an introduction. Still others were well paced, used a variety of formats, and made use of excellent consultants, including persons who are not professional consultants—parents and students. It is continually amazing to see how much attention educators pay to parents and students when they are not the parents and students they have to deal with on a daily basis. In retrospect, some of the liveliest moments of those conferences occurred at times when parents and students were carrying on an animated dialogue with teachers and teacher educators.

As a whole the conferences probably were no better nor worse than any other set of professional conferences taken at random. There was a certain irony in the fact, however that a program which purported to be as creative as TTT, and which *was* creative in many ways, continued to make use of the conventional models—conferences, lectures, paper readings, and discussions—to bring about change in people's behavior. Perhaps, the major contribution they brought to this process was the extraordinary mix of people that participated in it.

Clusters

When the Office began the cluster arrangement, it probably had in mind a regional replica of the Leadership Training Institute. At least, both groups performed many of the same functions—the one on a regional and the other on a national basis. In some instances, the LTI and clusters combined forces to initiate conferences and workshops, to plan for site visits, and to engage in other activities of mutual concern. Returning for a moment to the role of the Leadership Training Institute, we will remember that it had among its functions the following:

Providing for coordination among TTT projects.

Identifying common problems and exploring ways of resolving them.

Organizing workshops and conferences in response to needs expressed by directors or TTT personnel.

Disseminating general information, promising practices, program descriptions, and other information of value to both the national TTT audience, the cluster audience, and persons not associated with TTT projects.

Serving as liaison between Office of Education and the project directors.

When the above items are viewed from a regional rather than a national perspective, they fit the role of the cluster and its leadership. In implementing this role, some clusters placed greater emphasis on some aspects of their role than on others but that was probably inevitable, even as individual projects placed greater emphasis on some program areas and topics than on others. The Indiana project found itself in two clusters at one time or another. One was the Great Lakes Cluster, which included projects from roughly the upper midwest to the eastern seaboard. John A. Guthrie, Director of the TTT Project at Pittsburgh, served as the cluster leader for the Great Lakes Cluster. The eight projects which made up the Cluster and their directors are listed in alphabetical order below:

Cleveland State University	Sam Wiggins, Dean, College of Education
Indiana University	Gerald R. Smith, Director Center for Innovation in Teacher Education, School of Education

Michigan State University	William Hawley (co-director) Associate Dean, College of Education and Joseph Vellanti (co-director) Eastern High School Lansing School District Lansing, Michigan
University of Pittsburgh	John A. Guthrie, Associate Professor of Education
Syracuse University	Roy A. Price, Professor of Social Science and Education
Temple University	Jesse Rudnick, Associate Professor of Mathematics Education – Curriculum & Instruction
Wayne State University	E. Brooks Smith, Professor of Education. Department of Elementary Education.

At another point in time, Indiana was included in the Midwest Cluster under the direction of William Hazard, Associate Dean, School of Education, Northwestern University. Most of our memories are from the activities of the Great Lakes Cluster.

Like many clusters, the Great Lakes Cluster published a newsletter. It was slower than others in getting off the ground and died an earlier death. Most project personnel either did not have the time or did not take the time to provide the information and articles necessary to publish the newsletter on a regular basis.

The Great Lakes Cluster held a number of workshops, some involving common problems encountered in implementing programs and others focused on special themes, such as the liberal arts in education conference held in Syracuse during December, 1970 and one on the role of the local education agency in TTT held in Cleveland during October, 1970. Some joint conferences between clusters were carried out also.

One of the most interesting efforts to disseminate the works and results of TTT programs was carried out through an Action Lab of the Association for Supervision and Curriculum Development (ASCD) conducted by the Cluster during March, 1971. Each of the projects in the Cluster was involved in the planning and implementation of the program and some brought community resource persons to discuss their role in their programs; others presented films or slide and tape presentations; and still others gave informal presentations and broke the audience down into small groups for discussion. We are proud of the fact that Jim Mahan, TTT coordinator at Indiana, was the initiator and coordinator for this program, which was well attended and received at ASCD.

One of the important functions of the clusters was to implement plans and programs initiated by the Office of Education. In February, 1972, for example, we received a letter from the Great Lakes Cluster indicating that the clusters had agreed to take on a number of tasks for the Office of Education. Our cluster had been assigned the task of assessing the extent to which some form of cooperation or parity had been brought about between the various functioning groups. The Cluster suggested that the task be broken down into eight major dimensions of functioning as follows:

Goal setting or policy making
Budget or fiscal management
Staff recruitment and selection
Student recruitment and selection
Training functions
Planning and proposal preparation
Administration and management of direction of the project
Evaluation

The information was to be gathered in two forms. One required us to complete an extensive printed profile on our program using the dimensions indicated and with a focus on parity. The second called for the use of a cassette tape which had been provided to explain, comment upon, or clarify any of the materials we reported in the profile and to raise any questions we wished. The Cluster estimated that both of these tasks would require a total time of approximately five hours.

Since the explanation of the profile and the cassette material required ten pages, you can imagine the thought and time that was required to complete it in any meaningful way. In all honesty, we delayed engaging in the act at all for some time because it appeared so formidable. After two months or more, we finally did complete the materials and the tape. Our feeling was that there were two major assumptions underlying the materials that our project did not and could not meet. One of these was the assumption that a single program existed at the local level. Indiana's program had at least five major components and maybe six, depending on how one defined them. The second, equally invalid assumption was that a single function such as administration, for example, was always carried out in the same way throughout the programs. Indiana had a highly decentralized administrative organization and each of the program groups operated somewhat differently in reference to those decentralized areas of functioning. Finally, there was the assumption that every member of a parity group acted in the same way in all programs or that one could compute an average of the actions of the representatives of a particular parity group, and this was simply not possible with our project. For some components, some parity groups were not involved at all or were involved in one dimension and not others. For other components, a particular parity group might have major involvement in a number of dimensions of the program with different members performing in different capacities, depending upon their roles and functions. All of this was very difficult to put across through the instrument that was provided. Of course, the tape enabled us to say these things, but we put many hours in trying to figure out what was wanted on the profile and how we could best give the information we thought was wanted. We can assure you that it took us many more than five hours to complete that package.

From Indiana's perspective, the Cluster represented neither a raging success nor an unmitigated failure. Some of the meetings, particularly the planning sessions, turned out to be uninspiring, but the project personnel certainly have to assume their share of responsibility for that failure. Part of the difficulty may have been in the wide diversity of projects represented within each cluster. Some were located in large cities like Cleveland, Pittsburgh and Detroit, while others, like ours at Bloomington, were located in small towns. Some focused on the development and implementation of materials and made a concerted effort to involve liberal arts personnel, while others attempted to improve the relationship between the School of Education and the schools. Some appeared to be quite successful at promoting greater community involvement, particularly from the low-income community, in teacher education and in public education as a whole.

Perhaps another difficulty lay in the failure of the national TTT personnel to make clear what they expected of the cluster programs. To many, the clusters represented just one more drain on a limited amount of time, energy, and resources. Timing may have been an important factor, too. The LTI, the clusters, and the evaluation teams frequently were making demands at similar points in time, and it was difficult to respond to them and still deal with the problems of carrying out a local project.

Perhaps the major difficulty with the Cluster is the same difficulty that plagued the remainder of the programs. It was designed primarily to service the needs of the Office and not the local projects. This does not mean that there was no value in it for the local projects, but it does mean that local energies devoted to its tasks were frequently seen as burdens rather than as a means for achieving some local ends. Perhaps it is too unrealistic to expect the Office of Education to establish programs that would serve as advocates for local project needs or maybe it is our own myopia that did not permit us to see the clusters operating in this way. Whatever the reason, it does represent one project's view of these support vehicles.

Evaluation

Another facet of the national program was concerned with the development and implementation of an evaluation program. As a matter of fact, it is probably more accurate to speak of several programs—site visits, cluster efforts and the work of several evaluation teams—in order to understand the whole.

Site Visitation

Sometime during early October 1969—no specific date is given—a memo arrived from Harry N. Rivlin, director of the LTI (TTT). The memo announced that site visits had been planned ". . . at a meeting attended by six project directors, four people from the Office of Education, four Leadership Training Institute members, and two other community representatives." It indicated that the projects would be visited in November by four-man teams representing the parity groups. It also explained that the visitors would be chosen deliberately from outside TTT in order to disseminate information more widely on what TTT was trying to do.

The memo indicated that we would soon receive a letter from the Office of Education telling us what the consultants who read our second-round proposals thought of them and giving " . . . their specific recommendations for program improvement." It mentioned four weaknesses common to most proposals:

Few proposals indicated they were likely to succeed in getting cooperation on a parity basis from all four parity groups.

Not all projects were aimed at the third T (The trainer of teacher trainers).

Projects generally ignored the "multiplier effect" i.e., ways in which the projects could affect more than their own participants.

Few proposals indicated the ways in which the programs would change as a result of their ". . . admittedly limited experience to date."

Finally, the memo also emphasized that visits would not be concerned with project evaluation, particularly for second year funding, and yet another sentence read, "What LTI learns, it will, of course, share with you and with OE."

Another memo stapled to the first and dated October 13, 1969 announced a meeting in Chicago on October 22-23 to explain the site visit procedures to those who were to serve on visiting teams. A third memo from Rivlin arrived on October 31. He indicated that ". . . these visits should be most helpful in giving us an understanding of how the TTT concept looks across the country: the big view. LTI also will use the reports to help individual projects to improve the effectiveness of their operation." That memo also revealed that there would be a second round of site visits about six months after the first, or in late April or May. Finally, it said that directors whose projects had been visited would receive copies of all reports made by the site visitors as well as the team report as a whole.

The reaction of most of us associated with the Indiana project was one of dismay. Since our project involved a close working relationship with the schools, we had been in effective operation for about one month when the notice arrived that we would receive a site visit. All of this came at the heels of trying to salvage a $90,000 program out of a $1,000,000 request. We felt that neither we nor TTT as a program was ready for outside visitors after so short a period of time in *operation.* The word "operation" is emphasized because it is not fair to say that we had not been doing any thinking or talking about the program prior to that time. But thinking and talking about a program is one thing and putting it into operation is another. There was a second factor involved in our reluctance to entertain site visitors. We knew that one inevitably spends an extensive amount of time—perhaps too extensive for the occasion—on such events as site visits. Thus, despite Harry Rivlin's nay sayings about the use of the reports for evaluation purposes, sharing site-visit information with the Office of Education could mean nothing less than that. Under such circumstances, we were not likely to take the site visit too lightly.

On November 3, we received a letter from William Hazard, the director of the TTT Midwest Cluster, explaining again that a site visit would be made in the near future and enclosing a fifteen-page document which the site visitors were to use during the time of their visitation. The document included a brief set of instructions to the site visitors and a statement of objectives and goals for the national TTT Program. It specified the task of the team members as one of acquiring a variety of information including the following:

The rank order that the advisory committee, the administrative staff, the instructional staff, and participants gave to the five listed national TTT objectives.

The extent to which parity was being achieved among the four major groups.

The effects of the program thus far (which required over three pages of questions).

The operational personnel involved.

Any concluding remarks such as strong points or major problems encountered. (The concluding remarks, incidently, were directed both at the national program and the local project.)

In conclusion, it is safe to say that 1) the site visit took us by complete surprise so early in the game, 2) we felt we had enough to do to get the program under way without diverting efforts preparing for a site visit, 3) the use of outside site visitors was totally inappropriate at the time since we were scarcely ready to show the program even to other TTT personnel, and 4) if the site visit did indeed have to be made, it should have been established more heavily on the basis of the local program objectives than we felt it was, more heavily on the implementation of the program than the results, and more heavily on providing descriptive materials to the LTI than on providing evaluative materials to the LTI and presumably, the Office of Education.

Evaluation Research Center

The Evaluation Research Center, under the direction of Malcolm Provus, carried out the most extensive and continuous program of evaluation of TTT projects. As site visitation represented the most important component of evaluation during the 1969-70 school year, so the ERC program became the most important approach to evaluation during the '70 to '72 school years.

This program was introduced during the fall of 1970 in a training session held at the Chase Park Plaza Hotel in St. Louis. In attendance were representatives from the West Coast Cluster, the Southwest Cluster, the Great Lakes Cluster, the Midwest Cluster, and the Northeastern Cluster. Also present were several observer consultants employed to assist the ERC staff, several members of the LTI, and several persons from the Office of Education itself. Another session was held in Charlottesville, Virginia for some of the clusters in the East.

In addition to the training session, a project design brochure, some thirty-six pages in length, was made available to project teams. Finally, a slide and tape set was made available for those projects that wished to purchase it. It explained the evaluation program in outline form and was a useful device for directors to have in explaining the program to their staffs.

It seems safe to say that most of the project directors viewed the ERC approach as a very complex, comprehensive, and exhaustive one. It involved eight major steps, five different taxonomies, and four separate forms that had to be completed. The steps were 1) to identify participants in the program in each project, 2) to specify the major blocks of activities (called elements by ERC), 3) to identify the sub elements within each major block of activity, 4) to identify change variables for each type of individual or institution affected by an element or sub element activity, 5) to identify the receptors or the targets for the change variables, 6) to specify an input level for the change variable, 7) to determine an output level for the change variable and 8) to identify a time frame for each element and sub element activity with terminal points at which output variables were expected to be achieved. The taxonomies included an element taxonomy, a participating individual taxonomy, an institution taxonomy, an individual change variable taxonomy, and an institutional change variable taxonomy. The four forms provided the necessary data on each project.

Needless to say, a great many man hours of time were devoted to providing all of the information called for. At Indiana, the result was a sixty-to-seventy-page document describing every facet of the program in extensive detail. Most of the people connected with the process in our project felt it to be a considerable burden for several reasons. We felt that information so extensive, collected on fifty different projects, would probably wind up stored and unused in some computer. Second, we felt that we would probably receive little feedback on our own program that would be of great value to us in improving it. Third, we felt we had devoted many man hours of precious time to an evaluation effort that was, to say the least, somewhat removed from our project and its needs. It so happens that our own evaluation program at the local level was just getting underway that same year and that much of our evaluator's time during the fall was spent in completing the materials for ERC. That time could have been used for developing and implementing our own evaluation program. We did find one value that made the effort tolerable, if not enjoyable. The process did help us to clarify what we were trying to do and how we were trying to do it.

As far as results are concerned, we did receive a report on our project about one year later (September 15, 1971). The letter of transmittal identifies the results of this first effort:

> We are enclosing a summary of our evaluation work on your project. This summary includes four sections: a short description of your project, a report on installation measurement #1, a report on installation measurement #2, and a report on impact measurement.

By this time, of course, a new proposal had been submitted and approved and a new operational program had begun. Thus, the results were of little value except in making minor changes in the operational program.

All of this is said with the understanding that there were other uses to which the evaluation was put. Perhaps the Office of Education gained sufficient knowledge from the analysis to make more appropriate decisions about the funding of second-year programs, or perhaps the evidence was used to establish the effectiveness of the TTT Program with Congress and the Administration. If so, this probably did not occur until the 1972 fiscal year and perhaps not even until the 1973 fiscal year, depending upon when the data was made available and how it was used. Certainly by September 1971, the budget for fiscal year 1972 (calendar year 1971-72) would have been completed and submitted to the Congress. Some of the data may have been used in actual testimony before Congress, but probably a less detailed analysis would have been sufficient for that purpose. Still, it is probably more appropriate for the Office of Education to say what it got out of the enormous data collection effort. From a project level, it was not of considerable assistance.

Center for Instructional Research and Curriculum Evaluation (CIRCE)

In the spring of 1970, CIRCE, directed by Thomas Hastings and located at the University of Illinois, carried out a "head and dollar" survey of local projects through questionnaire and interview techniques. After the questionnaire data had been submitted in the middle of April, telephone interviews with directors were conducted during the month of May. A letter arrived approximately one week before telling us that the telephone interview would deal with the following items: 1) background information about the project, 2) major components of the project, 3) detailed questions about the components regarded as most successful including purposes, characteristics of staff and participants, relative contributions of the various parity groups, funding considerations, organizational structure, communications patterns, curricula, and cooperative arrangements with other units, 4) a brief description of major problems associated with the component regarded as least successful, and 5) our perception of the purposes of the LTI visit and its effect on our project.

The time and effort necessary to obtain the data requested was not enormous—much of it was already available in project records—and the interviewer did not pursue as much detail as the letter suggested.

Resource Management Corporation

On November 1, 1971, we received a letter from William L. Smith, then Associate Commissioner of the Bureau of Educational Personnel Development, which indicated that BEPD had developed ". . . a process evaluation system that is designed to serve as an important mechanism in project and program management for the Office of Education." It went on to say that the actual instruments for this system, devised by Resource Management Corporation during the previous year, consisted of two parts and required six hours to complete. The first part requested information from all EPDA and the second, from the program (such as TTT) providing funds for that project. The letter requested the completion of the instrument by November 19, 1971 and promised information on the project together with a composite description of other projects.

As almost all of the other questionnaires did, the RMC questionnaire dealt with the number and types of participants involved in the project, objectives for each component of the program, involvement of minority groups, descriptions of different project activities, and so on. Approximately two thirds of the total pages in the instrument were devoted to EPDA as a program and one third or less to TTT. At the end, there was a critique sheet requesting us to evaluate the questionnaire. Our copy reveals that it took us twenty hours to complete the package of information, that we gave the questions an average rating on clarity, that we had trouble with the definitions (e.g. distinguishing between trainers and trainees) and similar kinds of problems.

Perhaps this is the place to confess that we were continually running behind in providing data requested by the various evaluation groups. Our files reveal follow up letters reminding us that we had not provided the information by the original due date. There was no outright unwillingness to do so. Rather, time raced by so quickly in those days and our reaction time—to use an automobile analogy—was always longer than the time given to provide the information, or so it seemed to us. A backlash factor was at work also. Over a period of time, evaluation was met with considerable resistance on the part of project personnel at all levels. Instructional personnel resisted it because they felt it interferred with their training efforts. Participants resisted it because the responsibility for providing much of the data rested with them. Administrative personnel resisted it because it represented an investment in energy and resources with little payoff at the local level. The situation was further aggravated by the local effort at evaluation since it collected data from and tapped the time and energies of the same people. The backlash effects of extensive, continuous evaluation efforts are a serious problem and one that should be given more attention by those who design evaluation programs at both the local and national program levels.

Other Evaluation Efforts

At least two other evaluation efforts were initiated at the national level. One of these was channeled through the clusters to the projects themselves. The other was conducted by the Center for Education Policy Research at Harvard University under the auspices of the National Advisory Council on the Education Professions Development Act, a presidentially appointed review panel.

Perhaps the best way to explain the data request from the Center for Educational Policy Research is to quote two paragraphs from a letter that was sent to project directors.

> We would be most grateful if you could provide us with any evaluations or progress reports that you have undertaken at a local level, or which have been undertaken for you by others. We will be glad to observe any guidelines for the use of this information.
>
> These materials will be used simply to give us a broad overview of the way in which evaluation in the program is developing and in analyzing the efficacy of evaluation procedures now in progress.

The letter was signed by David Cohen, the executive director of the Policy Research Center, and dated February 23, 1971. In our response to Mr. Cohen, we sent the following information:

A general plan of evaluation showing target groups and types of evaluation instruments to be used.

Descriptions or samples of the instruments that were being administered during the '71-'72 year.

Preliminary results where they were available. (These were limited since our formal program of evaluation did not get under way until that year.)

The last progress report which we prepared for the Office of Education. This material was compiled by Dr. William Loadman, an evaluation specialist who was serving our project half time.

Obviously, it was not very difficult to respond to the open-ended letter which was sent by Mr. Cohen. We provided what materials we had and described the approach we were planning to use in our evaluation efforts.

The cluster evaluation was another matter again. It was an extremely difficult instrument to complete because of its complexity, because of the overlap in definitions and the lack of mutually exclusive categories and because it seemed to be making assumptions about our program (and the other TTT programs) that were inappropriate for the nature of TTT programs. Since this effort was described in considerable detail in the discussion of the cluster program, there is little need to duplicate that here. It is sufficient to say that this request was one of the most confusing, time consuming and difficult to respond to of any that we received.

Summary and Critique of National Evaluation Efforts

When one considers that local projects had enough difficulty in getting programs underway and in developing plans for evaluation which would aid them in making program decisions, the efforts put into the various programs of evaluation initiated at the national level did not seem to be commensurate with the results. Obviously, this observation is made from the perspective of a local project and only one project as well. Perhaps from the national level, the efforts were well worth the time and resources put into them and perhaps other project personnel and directors do not feel as strongly about the lack of relationship between effort and results as we do. Nevertheless, it may be useful to document the points which we feel are particularly salient in arriving at this observation:

The national program of evaluation often bordered on evaluation for evaluation's sake. We recognize that program personnel were probably under considerable pressure from their own superiors within the Office and the cabinet level, as well as from Congress, but it appeared to us—and perhaps to those from whom the pressures were coming—that all those evaluation efforts made the TTT Program and perhaps the EPDA Program as a whole look like it was running scared. In other words, it may have had the opposite effect from that intended.

Perhaps a greater emphasis on quality of data would have provided even better results. This is a hypothetical point, of course, since we will never know, but we could not help feeling at the project level that we were grinding out a lot of data that could not possibly be assimilated by any group of people in any reasonable period of time.

The evaluators did not really seem to take into account the nature of the TTT Program. They seemed to think of all EPDA programs as alike and often as a mere extension of earlier NDEA institute programs. "Body counts" and similar items of information were often substituted for more elusive forms of data. For example, we always found it difficult to distinguish between trainers and trainees because almost everyone in our program performed (we hoped) a dual role, even when they weren't being paid for it. We put professors into schools not just to provide better training for undergraduates and teachers in service but also to provide training for the professors themselves. We saw the students as trainers in that they were going to be providing feedback on how realistic the methods practices were when actually tried out in classrooms that day or the following day, and we expected teachers to provide similar observations about what was working, what was not, and why it was not. Thus, while we paid the teachers only minimal stipends and undergraduate students nothing at all, we did expect them to serve as trainers in at least that sense. This is but one example. Through participation in advisory groups, in evaluation sessions, and in program development sessions, they engaged in similar roles. But many of the questionnaires wanted us to distinguish between the trainers and the trainees, and while we found that distinction an almost impossible one to make, we usually made it with notes and explanations and comments attached.

Out of all the national evaluation efforts, the projects received relatively little feedback, and these efforts therefore were inevitably viewed as one more burden rather than an asset to be tapped. There were one or two exceptions to this in the form of reports—particularly the one by the Provus group—but their timing and format prevented us from making anything more than cursory use of them.

No feedback was given on how the data provided was used although most requests for information invariably made reference to the importance of the data for evaluating proposals and making funding allocations. It certainly does not seem unreasonable to us that the Office would wish to collect information about local projects in order to make more enlightened decisions about future funding, but it also does not seem unreasonable to expect them to provide more information on what was used and how it was used in order to arrive at decisions—to establish a set of public criteria by which program decisions were made. Then, whether we liked the decisions or not, we would be better informed about why they were arrived at in the way they were. Even this procedure, of course, would not provide an iron clad guarantee that the more paranoid among us would not continue to believe decisions had not been made in some arbitrary way, but it would have provided some grounds for those who wanted to believe otherwise.

The timing of the evaluation efforts was frequently inappropriate in at least three ways. First, during some periods, at least three national data gathering efforts were going on at the same time. Our director vividly remembers receiving a letter from the Office describing three such efforts and indicating that we would be hearing from each of them in the near future. Second, the timing was premature in at least one major instance: the site visitations. As we indicated before, we received word that a site visitation would be made after being in operation about one month. The visitation was actually made after about three months of operation. As anyone knows who has ever been involved in a complex training program, three months of operation scarcely gets you off the ground and you are really not ready to cope with teams of outsiders who know very little about the national program and practically nothing about your local one. Finally, the timing frequently appeared to be inappropriate for proposal approval, funding decisions, and for testimony to Congress.

The backlash effect, already alluded to, made it more and more difficult to collect valid and reliable data for both national and local purposes. In future Office of Education programs, greater consideration should be given to joint planning between evaluation personnel at the local and national levels so that duplication of efforts and the backlash effect can be reduced or eliminated.

To even the casual reader this list appears to be a strong criticism of the evaluation efforts made by or on behalf of the national EPDA and TTT programs. It is true, that from one project's perspective these efforts were considered a burden for which there was little return. It is quite likely, however, that Office of Education personnel and those persons actually conducting the evaluation efforts did not perceive them in the same way. Such differences in perception may be attributable in part to differences in roles and expectations and in the uses to which such data were put. Still, we believe we have made some points that should be considered in the planning and implementation of similar evaluation efforts in the future.

Conclusion

This chapter has described the role of the national TTT staff as seen in the eyes of one program. Admittedly, the chronology of events and their historicity is probably somewhat distorted by this limited view, but even a limited view may be instructive. It may be instructive for those in federal programs and in other funding agencies to see their operations from the perspective of a local project staff—to become aware of the issues posed by their moves at the national level. Most activities bring both intended and unintended consequences. Initiators of action tend to be more aware of the intended consequences than of unintended ones. Perhaps this chapter and the conclusions which follow will help to put both sets of consequences in proper perspective. This, at least, is our intention.

The national TTT staff probably did more than most federal program staffs to provide a range of support vehicles for the projects. The chapter discusses the role of the LTI, conferences, clusters, and evaluation in providing information, encouraging dialogue, articulating national goals, and promoting communication among the projects, parity groups, and national program staff. Perhaps the most difficult thing to do in initiating and maintaining these support vehicles is to achieve a delicate balance between the needs of the national program and those of the local projects. In the view of these authors, national needs generally took precedence, but perhaps that was necessary, if not inevitable. Even so, these vehicles were of value to the local projects as well since they did achieve many, if not all, of the things they were intended to.

From the viewpoint of at least one local project, the nature and dimension of the national TTT Program was a slowly evolving thing. The national program was not very clear at all in its first year, became clearer in its second, and really crystallized its thrust and objectives during the third year. The same process was happening to our project and probably to most projects at the local level. It is ironic that both of us were probably experiencing similar kinds of growing pains, but neither expressed awareness of what the other was going through. Perhaps some recognition and attention needs to be given to this as new comprehensive federal programs are evolved. If professionals at both levels can be assisted to become aware of the other's problems and needs, each may be more responsive to the other.

While the chapter makes some critical remarks about the role of the national TTT Program, these remarks should not be construed as a general indictment of the entire program or its personnel. The national TTT staff took on an enormous task—to bring about significant change in teacher education—and they left their mark on the future developments in this field. As individuals, they were warm and cooperative, listened carefully to our complaints and requests, and responded to them when they felt they could. They were personally acquainted with at least the leadership figures at each of the local projects and did not represent that impersonal bureaucracy in Washington which one hears so much about. Don Bigelow, Mary Jane Smalley, Charles Reed, Shirley Radcliffe, and others with whom we worked conducted themselves as solid professionals and real people. When we disagree with some of the policies and practices which were implemented, we do so with high regard for those individual as professionals and as persons and with the understanding that *we* probably do not represent the last word in objectivity ourselves.

Perhaps the most useful point to be made from the chapter is found in an earlier observation that the needs of the national program and those of the local projects are not identical and at times may even be in conflict. For example, national demands upon local project staffs during early stages of development can present a distracting annoyance at best and a potential threat at worst to the stability and soundness of the local project. They frequently focus time and energy away from local needs, vie for the attention of local participants, and overload the resources of local projects at a time when such projects have all they can do to pull themselves together. At the same time, as local project personnel, we acknowledge the need and right of the national program to be evolving its goals and activities as we are evolving ours. The national staff seldom had any more lead time – and may in some instances have had less – than it provided us. Still some thought and effort must go into this dilemma at both levels if wise and practical solutions to these problems are to be found.

II References

1 Much of the information on staging was obtained from a Michigan State University document identified as *"Triple T" Project* dated 1-5-68, and bearing the initials W. B. H.

2 Unpublished paper entitled *Excerpt from MSU Proposal for National Institute for Planning of Inservice Development of Teacher Trainers, Stage III and IV.* W. B.H., 12-19-67, p. 3.

3 W. B. H. *op. cit.*, p. 4.

4 *Announcement and Prospectus of the TTT, Training the Teachers of Teachers and Related Educational Personnel,* March 15, 1968, pp. 1-2.

5 *Ibid.*, p. 1.

6 *Education Professions Development Act – Program Information – Trainers of Teacher Trainers Program,* 1969, p. 6.

7 This material is quoted from the cover page of an Office of Education document labeled, *Draft, TTT Program Design,* October 5, 1970.

8 *Ibid.*, p. 1.

9 *Ibid.*, pp. 4-5.

10 *Ibid.*, p. 5.

11 *Ibid.*, p. 5.

12 *Ibid.*, p. 1.

13 This material was derived largely from a paper entitled, *The Role of the Leadership Training Institute, Training of Teacher Trainers,* October, 1969.

III The Indiana TTT Project

The preliminary announcement that our proposal for a TTT grant had been approved came in a letter dated November 22, 1968. The opening paragraph read as follows:

> I am pleased to inform you that your proposal to conduct the training project identified above under the Education Professions Development Act (EPDA) has been recommended for support. You will be interested to know that this year, the first one in which EPDA has been in effect, more than 3,100 project proposals for new programs have been received, many more than received in any previous year under predecessor programs. The funds available nationally, $78 million, will provide support for only about 624 new programs and 275 second year continuations. For this reason, almost without exception, no program can be funded to the full extent of the original proposal.

The letter went on to say that the process of evaluation had been a rigorous one and that major changes would be suggested in some of the projects during the negotiations to follow. It also said that the Notification of Grant Award would be received in the near future and that it should be studied carefully by both the proposed director and the business officer. After several other paragraphs of information, the letter was signed by Don Davies, Associate Commissioner for Educational Personnel Development.

Needless to say, the Indiana task force members were delighted at the news of having received a grant after putting considerable effort into workshops, meetings, and proposal preparation. While our delight would turn to uneasiness with further word on funding, we were floating on air for a short period after that first announcement. It meant a chance to continue the development of several programs that had emerged from previous efforts. Just as the national TTT Program was an outgrowth of several programs that had preceded it—the National Defense Education Act, the Elementary and Secondary Education Act, the Higher Education Act, to name the obvious ones—so the Indiana TTT Project was influenced and precipitated by a number of prior events.

Three programs stand out in this regard: INSITE, TEAM, and CITE. INSITE (Instructional Systems in Teacher Education) was a six-year, experimental program in teacher education financed primarily by a grant of $750,000 from the Ford Foundation. Designed for both elementary and secondary teachers, the program included the following components: (1) seminars in the natural sciences, social sciences, and humanities, (2) a professional semester which integrated the psychology of learning, methods instruction, and student teaching, and a one-semester resident teaching internship. At the end of four years and three summers, the students graduated with a Master's degree.

During 1968-69, a small group of faculty involved in the INSITE program evolved a new program called TEAM (Teacher Education through Applied Methods). Initiated with financial support from INSITE, TEAM produced a modification of INSITE's professional semester for elementary majors. It combined methods instruction in language arts, science, mathematics, and social studies with a practical experience in schools. A set of core topics helped to unify the methods courses, and the use of simulation materials provided an introduction to "real" classroom problems. Student teaching followed the TEAM semester.

Both INSITE and TEAM made unique contributions to TTT planning. INSITE was the first major program at Indiana to bridge the gap between the isolated, theory-oriented world of the university classroom and the here-and-now world of elementary teaching. This feature was to be a hallmark of TTT. Although TEAM contributed another variation to the INSITE model, its major contribution to TTT was not in program but in personnel. We shall return to this point in a moment.

Although the INSITE program had a number of innovative components which were widely recognized and its graduates were generally happy about the training they had received, it did not have as much impact on the mainstream of teacher education at Indiana University as its potential had promised. The faculty acknowledged that this was true of other experimental programs as well. As a result, conversations were initiated during the spring and fall of 1967 on the need to establish a facility which would bridge this gap.

Out of such discussions evolved the Center for Innovation in Teacher Education (CITE). From its beginning in January, 1968, CITE's purpose was to encourage the development, trial, evaluation, and dissemination of a broad range of innovative programs, materials, and practices in teacher education. While its immediate goal was to expand alternatives for teachers in training at Indiana University, many of the innovations were expected to have broader generalizability as well.

Given the development of CITE and the scheduled termination of INSITE, it seemed quite logical that these two programs should become interrelated during the final period of the INSITE grant. With this in mind, a request was made to the Ford Foundation to extend INSITE for one year, using funds remaining from the original grant. This enabled the last group of INSITE students to complete their program and permitted CITE to become established and to extend the accomplishment of INSITE in a number of ways.

The TTT Project became one of the early products of that partnership. There were two reasons for this. First, CITE was eventually designated as the institutional agent for the TTT Program. Second, the group of faculty that had been involved in the TEAM Project agreed to work as a group in the development of the TTT proposal. This group and others who joined them forged a new variation of the INSITE professional semester but with several important changes. The new program was designed for an entire academic year rather than a single semester. It also incorporated in-service development for teachers, training in supervisory skills, and practical experience for graduate students, but the basic idea of combining theory and practice emerged from INSITE's experience. All of these developments were happening in the fall of '67 and the spring of '68, when plans were taking shape for the TTT proposal.

Developmental Stages

The Indiana TTT Project had five fairly distinct phases. These are listed below with a rough approximation of the time covered and the federal funds available for each period.

Since the plans refer to local developments and are identified in retrospect, they do not correspond directly to patterns of federal funding. For example, the initial grant of $90,000 officially covered the period from December, 1968 to August, 1970 and overlapped with the planning and start-up phases of the local project. However, the funds are listed after start up since they were primarily used for this purpose. This overlap was probably desirable in that it permitted a smooth transition from one phase to another without a gap in the funding.

A description of these phases and the programs that emerged from them may be of value in understanding not only the Indiana TTT Project but the evolution and decline of other programs supported with outside funds. While the label given to each phase is designed to capture the spirit of that period, one phase blurred into another during the actual process. The starting and terminating points for each phase are particularly arbitrary and generally follow the academic calendar and the pattern of government funding. Although these phases are somewhat arbitrary, there is probably some utility in viewing a project as having a life span of its own. The problems that emerge at different periods reflect the idiosyncracies of that period.

Planning

The basic chronology of events in this phase has been presented in Chapter II, but there are several features of the planning phase that have not been given sufficient attention. The planning period was longer than many programs have to become operational; but the time frame does not tell the whole story. Even the word, "planning," isn't completely accurate since it includes the following kinds of activities.:

Attendance at meetings and workshops to become acquainted with the TTT concept and the guidelines for the national program.

The establishment of a task force and the development of working relationships.

The development of a plan for an operational program.

Table III-1 Phases and Funds

Phase	Period	Funds
One Planning	January, 1968 to August, 1969	Local funds primarily
Two Start Up	September, 1969 to August, 1970	$ 90,000
Three Expansion	September, 1970 to August, 1971	$190,000
Four Institutionalization	September, 1971 to June, 1972	$157,000*
Five Dissemination	July, 1970 to June, 1973	Funds remaining

*Funding for TTT ended with the provision of $157,000. Smaller amounts were provided from Institutional Grant funds, also administered by the Bureau of Educational Personnel Development, after June of 1972.

- The preparation of a written proposal which would convey the operational program with clarity and precision.
- A six-month period of waiting while proposals were being read and evaluated.
- Trimming the plan to fit a budget which was much smaller than expected.
- Identifying personnel who would participate in the operation of the program.
- Developing a fully detailed operational plan.
- Getting a final commitment from specific schools.
- Recruiting students and other participants.

So what looks like twenty months of planning rapidly vanishes when it is viewed as five months of meetings and proposal preparation, six months of waiting, two months of debating and deciding, four months of operational planning, staffing, and recruiting, and three months of planning and preparing a second-year proposal. Anyone who has been through it knows the endless round of meetings, the million and one details, the haggling and debating, the memos, working papers, letters, phone calls, proposal drafts and redrafts, and all of the other things that are necessary to getting a program off the ground. Only the excitement of being caught up in the process enables the persons involved to get through the backups, foulups, and frustrations that inevitably occur.

The waiting period while proposals are being evaluated has its unique problems. Logically, it should be a time for continued planning but psychologically, that is difficult to achieve. The period leading up to the submission of a proposal is an exhausting one, and it seems quite reasonable, perhaps even necessary, to use the period following to relax a little, take a deep breath, and turn your attention to other priorities. Then, too, there is always the possibility that the proposal will not be funded. Additional effort could lead to very marginal gains if the program is not recommended for support. Finally, certain aspects of the proposed program may be modified or eliminated during the negotiation process, and persons submitting proposals are least equipped to determine in advance which parts are likely to be affected. The last two points are particularly critical in proposals of the magnitude and complexity encouraged by and submitted to the TTT Program. Certainly from a psychological viewpoint, and perhaps from a logical one as well, waiting is about the only game in town.

Start Up

Our initial feeling of pleasure at receiving Don Davies' letter soon gave way to a sense of uneasiness when we learned that we would receive $90,000 instead of the $1 million we had requested for the same time frame. There was even some talk among us of refusing the money on the grounds that we would only make ourselves look silly trying to conduct a program even remotely related to the one we had submitted for that amount. After the initial disappointment subsided, a we-can-do-something philosophy prevailed, and we set about the task of deciding how to salvage some fragment of the total package that could be put into operation for $90,000. While this issue arose during the planning period, it represented our first major start-up problem.

Perhaps it would be more accurate to say there were two problems. One came under the general heading of morale. A great many people had invested a lot of time in putting the proposal together. Now, many of them had to be told they would not be participating in the TTT Program, at least not during the first eighteen months. This aggravated some relationships that were tenuous at best and even threatened some good ones.

It was not the $90,000 *per se* that created the problem. This was and is a considerable sum of money. Rather, it was the set of expectations that had been established by the Office of Education. This point is not made in anger or with any taste of sour grapes. It is said in the hope that it will provoke some review of what happens when funding agencies create certain budgetary expectations on the part of people and then come no where close to meeting those expectations. One of the authors of this chaper vividly recalls some of the early meetings explaining the TTT Program. As a former research coordinator with the Office of Education, he was quite aware that most programs do specify some range or limits for program budgets. As a result, he raised this question not one but several times at early meetings and was told on each occasion that proposals of considerable magnitude were expected. The figure of 10 or 12 such programs throughout the country was used in some of the early discussions.

Somewhere along the way and probably for quite legitimate reasons (e.g., Congressional pressures), The Office of Education had second thoughts about such a small number of programs and funded an initial number of more than 50, including planning, pilot, and operational grants. The result was that a lot of persons spent a lot of time developing $1 million dollar proposals when $200,000 to $300,000 would have been more realistic and would have meant less disappointment and confusion when grants were actually announced. Smaller proposals would have been less complex and easier to evaluate as well.

It is quite possible that Indiana's experience is unique—that most programs were granted a high percentage of their requested budgets, but informal remarks from Office of Education personnel and the directors themselves suggested that a similar situation existed, to a lesser or greater degree, with all of the projects. It is probably impossible to eliminate all of the discrepencies between requests and grants, but realistic expectations would help to prevent morale problems and would initiate the federal-local relationship on a better footing.

The second start-up problem has been alluded to already in the discussion of the planning phase. Operational components had to be identified to fit a $90,000 budget. As a first step, the director prepared the following statement for the task force that had been involved in the planning and preparation of the proposal.

> The decision we are faced with is what to do with $90,000 which OE is willing to make available to us for the period from the initiation of the contract to June 30, 1970. In making this decision we must begin with several assumptions. The list below appears to be a legitimate set to take into account:
>
> The project must focus on the training of teacher trainers.
>
> The project must provide a viable role for the Bloomington public schools, College of Arts and Sciences, and the School of Education. These roles probably will appear most viable to the OE if they can be integrated in some way.
>
> The project should help us to move toward the goals laid out in the original proposal.
>
> The project should include the implementation of an operational program, if only in a very limited way. (Planning alone probably will not get us additional funds after June 30, 1970.)
>
> The project must be something we can build upon beyond June 30, 1970. It should help us to parlay the $90,000 into a larger amount for additional work.

With these assumptions in mind, we examined the TTT proposal to determine what programs could be implemented within the budget restrictions placed upon us.

This led to a third major task of the start-up period—the actual implementation of the program and the refinement of it. In reality, there were two programs, each with its own objectives, its own procedures and its own staff. These programs are described in detail in a later section of this chapter. It may be helpful at this point, however, to identify them and to examine some of the process considerations which entered into the operation of these programs.

The Professional-Year Program provided an integrated field-based training experience for methods professors and their graduate interns, elementary school teachers, and undergraduate elementary education majors in several local public elementary schools. With few exceptions, all training activities were conducted in the field over the course of a full, academic year. The Secondary School Mathematics Program provided for the integration of mathematics content, mathematics methods, and student teaching experience in secondary schools. It involved the joint efforts of the Department of Mathematics and Mathematics Education within the University, public junior and senior high school teachers, and undergraduate majors in secondary education.

As we began to recruit schools for the Professional-Year Program, we found that the ones we wanted were not the ones that wanted to participate. We are not quarreling with their decision. They may have had very good reasons for not participating. Some were involved in other programs; others simply did not like the concept of the TTT Program or the way it was presented. We accepted their decision then and we reaffirm their right to have made it now. Of the four schools that volunteered, two drew most of their children from higher socioeconomic areas and the other two were a mixture of children from solid middle class and economically disadvantaged backgrounds. This was one of the points of contention among the site visitors. They couldn't understand why, if we had worked hard enough, we could not have involved schools with more economically disadvantaged children. They even suggested that the central office administration could have or should have done more arm twisting with the principals involved.

We also had trouble with the schools. During the year of preparation, several persons, from the Office of Education down to the local level, had mentioned that one of the problems between the university and the schools was that the university invariably developed a program and brought it to the schools as a fait accompli, permitting little input from the school personnel during the program's development. We made the mistake of heeding that advice too carefully. We went to the schools with an outline of what we wanted the TTT Program to be and do and asked them to participate with us in the development of it. Given the wisdom of hindsight, their reaction was predictable. How could they decide whether to participate in the program when they didn't know what the program was going to be. To ask them to do so was to ask them to place too much trust in the openness and willingness of university personnel to listen to their ideas and inputs, and perhaps they had never experienced enough of that in the past to really believe it would happen. Beyond that, we were asking them also to commit themselves to a task which was obviously, even to those without experience, a long and arduous one, and they were probably not ready to make that commitment to an uncertain program in teacher education, given the drain on their time and energies which their teaching already required. For whatever reasons, we took a lot of "flack" from school personnel for not coming to them with a program. Perhaps, the moral is, "You can't win no matter how you deal the cards," but we don't really believe that. What we really needed and didn't have during the proposal development stage was a continuous and steady input from principals and teachers. This is not to say that they were not involved at all, but their involvement was a limited one for many reasons, some of which we had more control of than others and simply did not exercise.

To put it bluntly, we were too content to rely upon the old "trickle down" theory of organizational change—start at the top and have the gatekeepers pass the word along to the junior members of the organization. Within the university, we employed a more decentralized approach to decision making from the beginning. As a result of this and probably other factors as well, the professors involved understood and accepted the program from its inception. In both cases, we had to have the consent and approval of highly placed administrative officials, but in one instance, we did not devote enough effort to attracting an even more critical mass of humanity: the people who were expected to carry out the program within the schools.

The mistake was costly in other ways. Program development took more time, created more problems, and unleashed more tensions than probably would have been true, had we involved more principals and teachers earlier, and more completely, in the process. Then the school personnel would have assumed the leadership in presenting a more complete and yet still open-ended program to their fellow teachers and principals. So we learned something during the start-up year, but not without paying the cost. Not the least of the costs was that two school faculties voted to discontinue the program at the end of the first year. The other two, bless their patient hearts, remained with us to the end of the federal funding and continue to this day to participate in an institutional version of this program.

Expansion

Without question, the second year of funding was a year of expanded resources and expanded programs for the Indiana TTT Project. During this year, a federal grant of $190,000 was provided, more than double the $90,000 available during the start-up period. This increase enabled the project staff to expand its activities in the two programs begun during the start-up year and to initiate four new programs as well.

The additions included (1) The Early Experience Program, (2) The Community Involvement Program, (3) The Urban Education Program, and (4) The Multiple Arts Program. In addition to meeting specific local needs, these programs helped us to encourage greater participation from the faculty in Arts and Sciences and from representatives of the community, particularly the low-income and minority community. Evaluation was also added during the expansion year. While it had been built into the project from the beginning, the limited amounts of funds in the first year delayed its implementation.

The expansion phase was also a time when the national TTT Program was expanding its activities. The LTI, operative in previous years, was extending its influence through the preparation of position papers, the initiation of conferences and workshops, the provision of assistance to local projects, particularly those in the pilot stages of development, and by assisting the Office of Education in the preparation of its policies and guidelines. The clusters had begun to be more active, making plans for newsletters, workshops, intervisitations and similar activities. Finally, several efforts to gather information and evaluate the results of projects and of the national program as a whole had begun to take shape. All of these activities had their impact at the local level.

The result of this expanded activity was a year that was hectic. Enrollment doubled in the Professional-Year Program; two new schools participated in the program for the first time; four new programs were brought into operation and the process of evaluation, both locally and nationally, had begun in earnest—it was quite a year, quite a year.

The year of expansion gave impetus to a course that was already being followed: the decentralization of program decisions. During the first year the two programs involved quite different personnel and each group developed plans for its own program. In the second year, with so many developments taking place in parallel, it would have been virtually impossible to do anything but decentralize.

Besides necessity, there were two critical components to a rationale for decentralization. One of these lies in the belief that persons who are involved in making decisions are much more likely to carry them out when the time arrives for doing so or to reexamine and revise them when they no longer serve a purpose. The other feature of the rationale has something to say about parity and institutional change. Within a particular institution, those who are open to change are not clustered together in neat packages. Where two or three such people are gathered together, they must be identified and reinforced—that is, given the opportunity to build their own teams and programs. The rule of decentralization enables change-oriented persons to do this.

More often than not, these critical masses of people do not have equal representation from each parity group and one group may not be represented at all. As most of us know, the real world is not comprised of ideal work groups waiting to be summoned to a task. Given these circumstances, it was highly probable that the coordinator and staff of each program would put together a unique mix of parity group participants. Thus it was, with rare exceptions, that total parity was never achieved in any program. Realistically, we could either ignore this dis-parity, accept it, or try to change it. We chose the latter two. That is, we chose to view parity as a "process of becoming" rather than the "state of being there." We accepted the fact that some programs did not have, indeed perhaps never would have, something as specific as participation on the part of all four parity groups. We did so knowing that we could have required participation (not parity) by stating it as a prerequisite to being involved in TTT and using Office of Education guidelines for leverage where it was useful or necessary. But requiring "parity" is a little bit like requiring electives, and we believed it probably would lead to some kind of letter-of-the-law response. On the surface would be parity; underneath, dissension and turmoil or apathy and disengagement.

Accepting parity as a process of becoming and program groups as being in various developmental stages of that process did not rule out all forms of intervention by the central administrative staff of the project. (By central staff is meant the director, coordinator, an administrative assistant, the evaluator, and occasional consultants.) Rather, it ruled in everything but coercion in various guises. However, to set the record straight, not everything was tried by any means, and more things were tried with some groups, usually the more receptive ones, than with others. The issues arising from these interventions are discussed in Chapter IV and the results are reported in Chapters V and VI. For now, it is enough to say that the year of expansion made us acutely aware that conceptualizing and operationalizing parity and other TTT concepts posed problems of considerable magnitude.

Institutionalization

The year of expansion was followed by a year of reduction—at least in terms of funding. In 1971-1972, federal funds were reduced to $157,000. Our reaction fell somewhere between surprise and shock. The Indiana Project had achieved a lot in its expansion year. All of the things we planned to do we did. Furthermore, we had learned to temper our requests for funds so that our expectations were more reasonable. Our request for 1971-72 was $320,035, a sizeable increase to be sure, but not an unreasonable one in the light of accomplishments and future plans.

The explanation for the reduction was a familiar one for those who traffic in government or foundation funds. The funds available to the EPDA Program as a whole had been reduced by Congress and every local TTT project with rare exception had its level of funding reduced, some by substantial percentages. Thus it was that we accepted a 17 percent reduction in funding—not with a shout of eternal gratitude but with a quiet, uneasy sigh of relief. It could have been worse—and apparently was for many projects.

This minor tragedy did have its positive side effects. It heightened our awareness of how fragile our existence was as a funded program and how brief a period of time remained to wrap up our affairs. Taken alone, the situation may not have appeared to warrant such a melodramatic conclusion, but there were other voices in the wind. In the spring of 1971, at the suggestion of Donald Bigelow and Donald Davies in the Office of Education, Dean David L. Clark of the School of Education called together the directors of seven School of Education projects that had been awarded grants from one EPDA program or another. Reputedly, this was the largest collection of EPDA projects in any single institution in the country. Davies and Bigelow proposed that Indiana consider the development of a single institutional grant proposal which would (1) do away with the projects as individual entities, (2) eliminate areas of duplication and overlap, particularly in the administration of these grants, and (3) incorporate the best features of each program into a unified whole with the potential for producing significant change within the University, particularly in teacher education. The project directors met with Dean Clark and other administrators over a period of several months and reached an agreement to move forward on the grant proposal.

In other words, developments at both the federal and local levels made it increasingly imperative that institutionalization of TTT programs proceed with deliberate speed. Fortunately, developments at the local level and the subsequent approval of the institutional grant by the Office of Education made what might have been a period of gradual winding down a period of transition. Programs which were largely, but by no means wholly, funded by TTT were modified to fit a greatly reduced level of funding through the institutional grant. Since that time, one program, Secondary Mathematics has been completely institutionalized—that is, it continues to operate solely on University resources. All but one of the other programs also continue with varying levels of institutional grant support and with considerably increased levels of local support. Indeed, it is our belief that most of them can now be completely institutionalized when federal support is discontinued at the end of 1974-75. This does not mean that all of them will be, but they do continue to operate at the present time. It was, of course, fortuitous that things happened the way they did, but these events do suggest that more attention needs to be given—both by local and national personnel—to ways of insuring such transitional periods. Some of the recommendations in Chapter VII speak to this point.

Dissemination

The fifth and final stage of the Indiana TTT Project began long before institutionalization, but it took on added significance during the period from July 1, 1972 to the end of the grant period, December 31, 1973. In fact, it is difficult to pinpoint a specific beginning for this phase and virtually impossible to recall a time during the project when we were not engaged in some form of dissemination. Press releases, announcements, articles, presentations, professional meetings, television shows, conferences, newsletters—all of these things and more constituted a steady stream of dissemination activities from day one when the project became official.

Nevertheless, it was the last eighteen months that were critical ones for the dissemination phase of the program. First, the project had "peaked" as an enterprise and its accomplishments had been achieved. While bits and pieces of the effort had been released, no attempt had been made to document the whole prior to that time. Second, the project was losing its identity as a project—partly by choice, to expedite institutionalization and partly because it had reached that point in its life span. If an effort was to be made to analyze and distribute the results of the program, it had to begin before the inevitable disintegration took place. Finally, the project had a small amount of funds remaining in the grant and the Office of Education was willing to see them used for this purpose.

As it turned out, the timing of our emphasis on dissemination was a little on the downhill side, and we nearly lost the opportunity. Several persons who had committed themselves to the task left the University; others took on new responsibilities; one was hospitalized for several weeks—and the writing ran behind schedule. A few stayed with it and two major publications emerged. One of these, *Contemporary Practices in Secondary Mathematics Teacher Education*, reports the results of a nationwide survey conducted by Indiana TTT personnel. The other is the publication you are reading.

These publications do not tell the whole TTT story—not even the whole that has not been told before. Several books would not exhaust the supply of anecdotes and issues, personal meanings, and program accomplishments. But if we have been at all successful, you will have experienced the essence of TTT through the eyes of a single project.

You will have struggled with some of the decisions, experienced some of the emotions, encountered some of the failures, and enjoyed some of the triumphs. What more could anyone ask from the printed word.

Philosophy and Programs

To fully understand the Indiana TTT Project, one must be aware of the philosophy that lay behind it and the practicalities that had to be dealt with as programs began to emerge. The change model employed in TTT had both individual and institutional dimensions. The individual change model assumes that individuals can and do change their behavior in training settings and that they then make use of the new behaviors in the settings in which they will be employed. It is assumed, for example, that undergraduate students going through a regular teacher education program acquire knowledge, skills, and behaviors that they will use in their later work with children in schools.

The difficulty with the individual change model is that it does not take into account the variety of pressures that are brought to bear upon the individual when he leaves the social system of the training setting and enters the social system of the employing institution. The social system of the real world of teaching places constraints on him that were not operative in the world in which he received his training. Very often, in fact, he is socialized into a world of teaching in which the norms and values are quite different from those he and his instructors verbalized in methods and other classes. The result, as research evidence indicates, is that most beginning teachers behave not as they were taught but as they think they must in order to survive in the schools. Over a very short period of time, their attitudes and values become very similar to those who are already in the profession. In brief, new teachers tend to move away from the attitudes, values, and practices they learned in institutions of higher education and to adopt the attitudes, values and practices of the schools.

This does not mean that we should give up the goal of trying to change the behavior of individuals. Changing individuals is the sine qua non of any educational program. What *is* meant is that individuals are more likely to change their behavior under some conditions than others. Let us briefly list the conditions that are conducive to change.

Freedom to try new ideas with little or no penalty for failure.

Ample time and resources to create and try out new practices, programs, and materials.

Involvement of persons who are oriented toward the creation and implementation of the new.

Freedom to choose the direction and pace of change.

An institutional climate in which new ideas can flourish.

Administrative leadership which expects and encourages change to take place.

Institutional mechanisms which stimulate and facilitate the creation and institutionalization of change.

A rewards system which recognizes the efforts of those who try to produce the new whether they are successful or not. The system should provide even greater rewards for those who succeed.

These were the conditions we were trying to promote or take advantage of in the Indiana TTT project.

We were also trying to bring about institutional change with the hope that new institutional arrangements would stimulate and reinforce changes in the behavior of individuals. An institutional change model assumes that if one wishes to bring about change within an institution one must begin with the gatekeepers of that institution, the persons who influence the decision making process because of the key positions they hold. In elementary schools, the role of the principal is certainly a critical one. If he is not in favor of a particular change, he has many ways of impeding or nullifying any positive action. While the elementary principal represents the formal power structure in the school, there are persons in the informal power structure who are gatekeepers as well. Any feeling of disinterest on their part may be translated into passive resistance, open defiance, or disengagement. It goes without saying that representatives from both of these groups need to be involved in any program of institutional change.

Another assumption is that one is more likely to achieve institutional change objectives by working toward them. While this seems obvious, it cannot be emphasized enough, for it means establishing institutional objectives and restructuring institutional roles as a part of the training program.

A third assumption on which institutional change is predicated is that of providing training to several persons from the same institution so that the individual does not feel isolated on his return to his own institutional setting. If he has allies who have gone through a similar training program, he has persons to talk with and plan with in attempting to bring about change.

A fourth assumption of the institutional change model is that individuals in training be given an opportunity to make practical application of the knowledge and skills they have acquired in institutional settings that are as similar as possible to those in which they are expected to carry on their work after the training has ended. In other words, prospective teachers should be given an opportunity to practice their teaching skills in natural school settings. There is an obvious caveat in connection with this principle. Due caution must be exercised to teach the trainee not to accept what is for what ought to be but as a starting point for moving toward what ought to be.

The final assumption is perhaps the most important—that permanent institutional change must be planned for, begun, and completed, if possible, before the experimental program has terminated. The annals of education are filled with descriptions of programs that offer promise for a period of time and then fade into oblivion when the experimental period has ended—that is, when outside funding is withdrawn, or the persons involved enter into other ventures.

While this model of individual and institutional change guided our actions in the establishment and conduct of programs, it did not always do so in exactly the same way. The practicalities of each situation had to be considered as well. For an innovative effort to succeed, it must have the involvement of those who are change oriented and who are willing to invest a great deal of energy in bringing the change about. Unfortunately, such persons are not always clustered together in neat packages with similar interests and concerns. The first task then is to identify a "critical mass" of such persons around a programmatic theme that can be developed and implemented. The second task is to try to extend that "critical mass" with the addition of new personnel or alternatively, to develop similar critical masses in other program areas. Both of these strategies were employed with the Indiana TTT Project. Each program in the Indiana TTT Project represented a unique blend of these theoretical and practical considerations. As an overview, the six programs that emerged are again summarized.

Professional-Year Program A field-based year-long teacher preparation program for undergraduate elementary education majors that provided training for methods professors, graduate interns and public school teachers as well.
Community Involvement Program An effort to stimulate parity involvement on the part of the community through training sessions, seminars, tutoring, and field experiences in small town and large city settings.
Urban Education Program A program of week-long visitation and observation in the inner city which developed into a semester experience combining student teaching and work in social agencies. Undergraduate students in the College of Arts and Sciences participated for credit with students in Education.
Multiple Arts Program A cooperative effort between the School of Music, Art Education, the School of Health, Physical Education, and Recreation, and the Monroe County Community Schools. It provided training for graduate specialists in an integrated, creative-concept approach to the teaching of music, art, and movement to elementary school pupils.
Secondary School Mathematics Program A joint effort of the departments of Mathematics and Mathematics Education to bridge the gap between the college classroom and the public school classroom. University personnel and pre-service and in-service teachers shared decision making and implementation responsibilities.
Early Experience Program A cooperative effort of various departments to provide undergraduates with firsthand experiences in the public schools and related settings in the college years prior to student teaching. Each of these programs is described in considerable detail in the pages which follow.

Professional-Year Program

The Professional-Year Program was the largest single program in personnel and resources undertaken by the Indiana TTT Project. It provided an integrated program of training for persons at the TTT, TT, and T levels. Specifically it was designed to achieve the following objectives with each of the groups mentioned below:

To strengthen the reality orientation of methods instructors by exposing them daily to school practice and by providing feedback from teachers and undergraduates on the practical value of methods instruction.

To strengthen the supervisory capabilities of teachers (vis a vis undergraduates) through a formal program of supervisory skill training and by giving them greater responsibility for supervision.

To strengthen the reality-orientation of potential methods instructors (graduate student interns) through a program similar to item 1 above.

To increase the practical and theoretical value of methods instruction by integrating it with student teaching in actual school settings.

To broaden the exposure of pre-service teachers by providing them with a series of classroom assignments in different schools under different teachers at different grade levels.

In addition to these specific objectives, the program also had the effect of increasing the interdependence of school and university programs.

The objectives were achieved through a combination of academic and practical experience. The academic experience consisted of (1) a one-week workshop held at the end of each year, (2) a series of weekly seminars held during each academic year, and (3) several half day and full day workshops held at appropriate intervals. All of the participants obtained their practical experience in elementary schools in the Monroe County Community School Corporation (MCCSC). These schools served as training laboratories providing opportunities for each group of trainees to apply the skills and knowledge they had learned by offering an integrated program of methods instruction and student teaching for undergraduate students.

With the help of several teachers, methods instructors planned and implemented methods courses in language arts, social studies, science, and mathematics. The instructors and their graduate interns made use of elementary classrooms for observation and participation experiences and provided demonstration lessons with elementary students. These lessons were video taped for future use with undergraduates and teachers. The graduate students offered methods instruction to new groups of undergraduates in the second semester under the supervision of the methods instructors. The graduate students also substituted for elementary teachers during the first semester so that the teachers could participate in the offering of methods instruction and could receive inservice training.

The methods instructor also provided in-service training for the elementary teachers. Each instructor used the subject matter he was familar with (language arts, for example) to upgrade the supervisory skills of the teacher. The teacher practiced the use of these skills with undergraduate students who demonstrated their teaching skills with elementary school children. The methods instructors also served in the role of consultant, providing assistance to school personnel in program development in their fields of expertise.

Many of the elementary school teachers participated directly in the methods classes through lectures, demonstrations, reactions to the presentation of others, and so on. Moreover, their classrooms were used by undergraduates in carrying out limited instructional assignments. The teachers reviewed such assignments before they were carried out and offered suggestions to the students. They also observed the lesson and provided feedback to the student. In other words their role complemented and supplemented that of the methods instructor.

The practical experience which the undergraduate received during methods instruction established a foundation for the more extensive experience of student teaching. Student teaching varied slightly from year to year but usually took place during four weeks of half-day sessions and six weeks of full-day sessions in the same schools. During these periods the teachers worked closely with one or two students in her classroom. During the same period, the methods instructors provided feedback to the teachers on their supervisory behavior. Other university and school personnel (the principals and central office staff, for example) played a variety of roles as either trainers or trainees. Some served as consultants and made special presentations, and others assisted in the administration of the program. Still others participated by making observations and providing feedback on the operation of the program.

Table III-2 identifies the number of participants involved from each of the target groups and indicates their primary responsibility in the program. It is important to note that most were to serve in both trainer and trainee roles. Even the undergraduates who are not recorded in the trainer category performed the trainer function of providing feedback to methods professors.

Community Involvement Program

Several developments were taking place during the spring and fall of 1970 that led to the initiation of a program of community involvement in teacher education. Certainly not the least of these was the continued pressure by Office of Education personnel in the national TTT Program to stimulate parity involvement on the part of the community in all of the TTT projects. Without this pressure, we must honestly admit that we probably would have been much slower to recognize this need and slower yet to do something about it. It is to the credit of the Office of Education personnel that they maintained their pressure when the professionals were howling and gnashing their teeth.

Our recognition of the need was a grudging one at first. As professionals, we did not clearly understand how community representatives could participate in any meaningful way in the training of teachers and teacher trainers. Some of the more open among us had a vague feeling that the observations of the community would be helpful, but the idea of parity was completely alien to most of us. We couldn't even imagine it let alone implement it. (We still have some misgivings which are expressed in a later chapter on issues and concerns.)

Table III-2 Professional-Year Participants

Participants	Minimum number*	Type of Participants		Major trainer responsibility
		Trainer	Trainee	
Teachers	122	x	x	Undergraduate supervision and methods instruction
Principals	8	x	x	General coordination
Methods Professors	10	x	x	Methods instruction; in-service development of teachers
Teaching Associates	6	x	x	Methods instruction
Graduate Interns	17	x	x	Undergraduate supervision
Specialists in Supervision	9	x	x	Consultant help to all supervisors
Undergraduates	200		x	N/A
Others	13	x		Varied
Total	385			

*The numbers are minimal totals for three years through June 30, 1972. Many more have participated since then.

The initial impetus for a local program of community involvement came not from the faculty nor the community but from two graduate students, Jim Williams and Steve Prigohzy. In a memo written during the spring of 1970 Steve said, "Clearly, factors external to the school, strongly affect classroom performance in it. It is essential, therefore, that professionals not operate in isolation from communities they are charged to serve." Jim Williams was making similar comments from his background of experience with the Job Corps at Camp Atterbury in Columbus, Indiana. These comments and the already acknowledged pressures from the Office of Education began to move us toward a program—actually several programs—of community involvement.

The first of these, A Community Educational Center in Indianapolis, was proposed in the spring of 1970. One of the leadership figures in this work was John Brown, Chairman of Urban Education, a newly formed department in the School of Education. The new center was to be a joint undertaking by the Center for Innovation in Teacher Education, the agency housing the TTT Program, and the Urban Education Department. It was designed to bring together for training in a residential, inner-city facility in Indianapolis:

> . . . representatives of urban and rural communities, the public schools, university faculties, state and local government, business and industry, various socioeconomic levels, minority groups, and the citizenry at large, to exchange perspectives on the immediate and long-range goals of education and of teacher education and their relationship to the community.[1]

The specific objectives of the center program were as follows:

To create an awareness on the part of each participant of the range of feelings and perspectives on educational problems represented within a single group such as professors, inner-city residents, suburban teachers, and so on. The hope is to demonstrate the lack of homogeneity of thoughts and feelings within each group.

To assist professionals and lay persons from a suburban community (Bloomington) to obtain first-hand knowledge of educational programs and other social programs within the inner city.

To begin the process of modifying the attitudes of professionals—teachers, professors, and administrators—and lay persons from suburban areas toward inner-city residents and their educational needs.

To identify and develop cooperative projects that emerge from the seminars and other experiences within the Community Educational Center.[2]

Several lay and professional groups were identified to participate in the activities of the Center. They were:

Residents of inner-city Indianapolis.

Representatives from groups and agencies that are involved in the inner-city.

Representatives from faculty, administration, and students of the Indianapolis schools, public and private.

Representatives from faculty, administration, and students of IUPUI (Indiana University-Purdue University at Indianapolis).

Representatives from faculty, students, and administration at Indiana University at Bloomington.

Representatives from business and industry, local and state government, and other Indianapolis groups.

Representatives from Monroe County Community Schools.

Representatives from Bloomington residents and community agencies.

Representatives of institutions, projects, associations, and groups throughout the country that are active in planning educational programs for inner city areas.[3]

It is interesting to note the list of participants since they are representative of the four parity groups involved in the TTT Project and they were drawn from two quite different communities—Indianapolis and Bloomington. Even more significant is the representation at a breakfast program held in Indianapolis in June of 1970 to explain the purposes of the Center. It included school board members, the Superintendent of Schools, several top University administrators, representatives from leading social agencies such as Urban League, Flanner House, Community Service Council, several churches, the Business Development Foundation and Eli Lilly Corporation, to mention but a few.

As to the Center, it died aborning. Too many people apparently felt it threatened existing territories and relationships, and it was never given financial support. The reader may be wondering why so much space has been devoted to such an unsuccessful effort. The answer is twofold. First, it reveals the amount of work that often goes into program components that do not succeed. These programs require the same time and energy that successful ones do and in most cases, the outcome cannot be anticipated. Secondly, such failures may provide the basis for success in similar programs later on. Ideas are formed and relationships developed that may outweigh the immediate disappointment or at least make it more acceptable. We believe this happened with the Center proposal.

In the fall of 1970, the Community Involvement Program began in earnest. From the program's inception, involvement was viewed as a two-way street. That is, representatives from the community were encouraged to participate in teacher education and representatives of and participants in teacher education were encouraged to take a more active role in the concerns of the community, particularly with respect to education. One of the unanticipated benefits of the previous year's activity was the emergence of several clear objectives:

> To sensitize faculty, graduate students and public school persons to the needs, problems, and expectations of community subgroups, particularly the low-income community.
>
> To develop a dialogue between the public and professionals at all levels that will promote each group's understanding of the other's viewpoint.
>
> To involve the community in an active and meaningful way in teacher education.
>
> To evolve programs of mutual interest to both groups and to seek a commitment on the part of both groups to carry them out.

Community involvement programs were carried out in two settings. The one in Bloomington is described in detail here. The other, in Indianapolis, is covered under urban education.

During the fall of 1970 liaison was established with professors and instructors in several courses to suggest a modification in courses which took two forms. First, community resource persons, paid on an hourly basis by TTT, made presentations and served as discussion leaders during one or more of the class sessions. Second, some of the same resource persons served as "guides" for trips into the community and as discussion leaders for rap sessions which followed. Primarily low-income youth and adults were employed for these purposes.

Although several courses were involved in the use of such persons those primarily affected included:

F100	Introduction to Teaching
P280	Human Development and Learning
S485	Principles of Secondary Education

Each of these courses was and is a multiple-sectioned course required of all students (F100 and P280) or of all secondary majors (S485). Thus the impact of their involvement was substantially more significant than three course titles might suggest.

Several activities were initiated in these courses with community resource persons serving in a variety of roles.

Field experiences were arranged that permitted students to observe in culturally different settings such as inner-city Indianapolis and rural, southern Indiana.

Tutoring was carried on in a variety of school and community settings.

Observations were made at school board meetings, parent-teacher meetings, the Welfare Department, Community Action Program, municipal court, Neighborhood Youth Corps, Job Corps, day care centers, Christian Center, Planned Parenthood Center, and similar programs.

Rap sessions were held with dropouts, minority group members, juvenile offenders on probation, youth from low-income families and other youth who had experienced difficulty "making it" in the schools.

Visits were made to a variety of schools and school related programs—GED Program, Headstart, Montessori schools, free schools, preschool programs, and similar programs.

Students actually participated in a variety of programs as tutors, teacher aides, case workers, neighborhood workers, and similar roles.

While most of the participants in these activities were T's—that is, undergraduate students—many graduate students, professors, teachers, administrators, parents, and other members of the community participated also. Moreover, much of the leadership came from the low-income community. Data is presented to substantiate this point in the discussion of the major components of the program which follows.

Community Seminar Experiences

Seminars were conducted to provide an opportunity for interaction between individuals and groups representative of the various socioeconomic strata of our society. Seminars ranged from two to four, two-hour rap sessions. A concluding rap session was conducted with the participants to discuss what they heard or thought they heard people saying during the sessions, and what they could do as a result of having the experience.

In addition, regular two-week seminars were conducted specifically for undergraduate students preparing to teach and groups of low-income adults, middle-class adults, and adults and youth who had been left out, pushed out, or had dropped out of the schools. The topics centered around education, teachers, community, teacher preparation, schools, and similar topics. The table below identifies the number of participants in each type of seminar.

Community Field Experiences

Community field experiences for faculty and students included one or two days of observation in non-public school educational programs such as day care centers, Head Start, free schools, a Montessori School, the Neighborhood Youth Corps, Job Corps, Youth Opportunities, the GED Program, and neighborhood centers. In addition, some participants spent one half to two full days each week assisting or observing social workers, outreach workers, township trustees, well baby clinics, legal aid services, courts, employment counselors, and persons or agencies with similar functions. The table below identifies the number of persons participating in each category.

Table III-3 Seminar Attendance, Fall Semester, 1970

Type and Number	Project Participants					
	Individuals			Community		
	TTT	TT	T	Adults	Youth	Total
Open Seminars (12)	10	30	20	60	20	140
Course-related Seminars (7)	15	11	145	52	72	295
				Grand Total		435*

*The grand total does not necessarily represent the number of *different* persons who attended since some persons may have attended more than one session.

Table III-4 Field Experience Participants, Fall Semester, 1970

Participants			
TTT	TT	T	Total
40	12	153	205*

*The total does not necessarily represent the number of *different* participants since many have participated in more than one experience.

Community Tutoring Experiences

Students elected to tutor as one means of partially fulfilling a course requirement. Students tutored or assisted teachers in such programs as Head Start public schools, free schools, the Neighborhood Youth Corps, Job Corps, the GED Program, the Learning Lab, day care centers, the Christian Center, neighborhood centers, and similar programs.

The program was sufficiently successful during its first year to warrant establishing an Office of Community Experiences on a pilot basis during the 1971-72 year. This office served a broader range of needs and interests both in the community and in the School of Education. It was given the charge of reaching out to the people and agencies of the community in the same way that the Office of Professional Experiences, a long established office in the School of Education, was responsible for establishing and maintaining linkages to the schools. Its activities and results will be discussed at length elsewhere. For now, it is sufficient to mention that the decision to establish such an office was made at the end of the first year of the Community Involvement Program. Perhaps even more significant is the fact that the professor-coordinators for F100 and P230 joined their division heads in giving approval and in committing resources to this new enterprise.

Table III-5 Tutoring Experiences, Fall Semester, 1970

Location	Participants			
	TTT	TT	T	Total
Public School	N/A	30	30	60
GED Program	N/A	6	18	24
Special Education	N/A	3	15	18
Head Start	N/A	10	27	37
Free School	N/A	3	7	10
Day Care	N/A	3	8	11
Christian Center	N/A	1	14	15
Totals		56*	119*	175*

N/A means Not Applicable
*The column totals do not necessarily represent the number of *different* persons who attended since some may have attended more than one session or experience.

Urban Education Program

During the same period when the project staff was struggling with its developing commitment to community involvement, there was an increasing recognition of the need to establish a program in urban education at Indiana University. This concern was being expressed within the institution long before there was any awareness of Office of Education interest in such programs although interest and pressure from the Office certainly added to the impetus.

In other words, TTT was not adding a new thrust *in* urban education; it was adding a new thrust *to* this area. The initial objective for this thrust was the establishment of the Community Educational Center in Indianapolis. This effort, which did not succeed, has been described under the Community Involvement Program. Even though this program didn't succeed, it provided the relationships for additional efforts that were successful.

The first Urban Education Program began in 1970-71. It provided for a week-long program of visitation and observation in the Indianapolis community by Professional-Year students and faculty, including public school teachers and administrators. The program included visits to special programs and facilities within the urban community—Flanner House, Dignity House, Youth Educational Services—and to inner-city schools. Presentations were made by members of the John Birch Society, Black Panthers, and personnel from the operating agencies.

This week-long experience each semester led to the placement of some Professional-Year students in School 26 during the second semester for their student teaching experience. At the time, School 26 had a 98 percent black enrollment, a staff which was 50 percent white and a principal who was black. A black public school teacher and a white instructor teamed together to offer methods and to supervise the students during the semester. The Urban Education Program was continued during the next year and was constituted as a separate program for those with a specialized interest in teaching in urban schools.

In the fall of 1971, this newly established *Urban Semester Program* was opened to all elementary and secondary majors who had completed methods and were ready for student teaching. The program was developed jointly by the Center for Innovation in Teacher Education, the Department of Urban Education, the Department of Secondary Education, the Department of Elementary Education, the Office of Professional Experiences, the Indianapolis Public Schools, and Flanner House, a non-profit social agency in Indianapolis. In one of the elementary schools, the program was articulated with the Pupil Personnel Service Center-Satellite Program, a program to develop a new support professional in guidance and counseling for urban schools. While the program was similar for both elementary and secondary majors, the pattern for each is described separately because of differences in requirements.

The program for secondary majors consisted of a full-semester experience in Indianapolis. Approximately one half of the semester was spent in student teaching and the other half in work and exposure experiences with various social agencies. The group also lived in the city and participated in academic and cultural experiences as well.

The program established two sets of objectives—one for student teaching and the other for the experiences in the social agencies and the urban environment. The objectives for student teaching were derived directly from the handbook used by the Office of Professional Experiences:

> To provide for professional development of young teachers through integration of theory and practice.
>
> To help students achieve a realistic understanding of the individual child as a developing human being.
>
> To help the student see more clearly the relationship of the school to the community it serves.
>
> To promote the growth of student teachers by encouraging them to read and to become familiar with professional books, magazines, resource units, audio-visual aids, and other materials related to their teaching experiences.
>
> To guide the beginning teacher in understanding the total organization of the modern school.
>
> To develop certain important abilities involved in planning teaching-learning activities; in organizing materials of instruction to provide for the individual needs, interests, and capacities of youth; in handling routine elements of classroom management; and in evaluating pupil growth.
>
> To continue the development of essential personality characteristics of teachers such as breadth of interest, curiosity, dependability, and cooperation.[4]

The unique objectives to be achieved in the urban environment, including its schools and social agencies, were as follows:

> Each student should be able to identify a variety of environmental influences that contribute to the attitudes and feelings which a child brings to school.

Each student should be able to list a variety of resources that he might tap as a professional teacher to provide assistance to the students under his responsibility.

Each student should be able to identify several ways in which community agencies contribute to the problems that have been identified with urban dwellers (e.g., feelings of powerlessness, depersonalization, alienation, etc.)

Each student should be able to identify ways in which these agencies contribute to the resolution of these problems.

Each student should be able to identify several ways in which he has personally responded to the urban environment and the agencies with which he has worked.

Each student should be able to specify several ways in which the black community of Indianapolis or some segment of it has been critical of inner-city schools and propose ways in which the schools could be more responsive to such criticisms.[5]

These objectives were developed by the TTT staff working directly with Flanner House and the other social agencies involved.

The experiences associated with the program were of two major types: those typical of student teaching experiences in or related to the school program and those connected with the larger Indianapolis community. Since the former experiences are well known to professionals, no effort is made to describe them. The community experience program, coordinated by Flanner House, consisted of four parts. The first was a set of *work experiences* in one or more of four types of community agencies: governmental agencies, private social agencies, pressure groups, and community organizations.

The governmental agencies included educational agencies, offices of local government, employment and welfare offices, prevention and correctional agencies, housing, health and other agencies such as the Human Rights Commission, the Civil Rights Commission, and so on. The private social service agencies included employment agencies, day care centers, housing agencies, health services, alcohol and drug abuse programs, migrant and transient aid, settlement houses, recreation programs, and programs for the aged. The pressure groups included the Black Panthers, the John Birch Society, National Association for the Advancement of Colored People, Indianapolis Free Press, Southern Christian Leadership Conference, Urban League, Martin Center, Indiana Civil Liberties Commission, and Indianapolis Women's Liberation. Three community organizations participated. They were Northeast Side Community Organization (NESCO), United

Northwest Area (UNWA) and United South Side Community Organization (USCO).

A set of *exposure activities* constituted the second aspect of the program. These activities paralleled the work areas to which students were assigned during a given period. For example, students assigned to government agencies may have attended a meeting of the City-County Council, visited the courts, or accompanied a police officer on his rounds in a police car.

A third set of experiences may be described as *academic and/or cultural.* These included a course on racism, black arts theatre, seminars, special weekend programs, and similar experiences.

Finally, the fourth experience was that of living within the urban environment under conditions which simulated those of actual city dwellers. Students spent most of their time each semester in the urban environment including as much as three weekends each month. They made use of public transportation and coped with the other problems which urban dwellers face. Since they lived in "family" groups of five or six students, this too constituted a unique learning experience.

For this rather unique program, students obtained credit from a variety of sources. Eight hours of credit was earned for student teaching and as much as eight more hours of credit for the community experiences. The latter was obtained from both the School of Education and several social science departments in the College of Arts and Sciences.

The program for elementary majors was quite similar to that for secondary majors. Differences were due largely to the fact that elementary majors typically student teach for the entire semester, receiving fifteen hours of credit for the experience. However, elementary majors were released for as many as three afternoons each week to participate in the community experiences program. In some instances, this time was concentrated in a block of four or five weeks.

One of the unique administrative features of the program involved a subcontract with Flanner House, a social service agency in Indianpolis. This subcontract between Flanner House and Indiana University—approved in advance by the Office of Education—permitted Flanner House to serve as the coordinating agency for the community experience part of the program. Although technically, its work was reviewed and supervised by personnel of the University, the practical affairs of the program were administered by Flanner House. The result was one of those rare occasions when a university gave credit for a program administered by an agency other than the public schools. From a program standpoint, the operation was even more diverse. Martin Center offered a course in race relations, and other agencies participated in the provision of both field and seminar experiences. While all of the parity groups called for in TTT guidelines were represented, they tended to remain in relative isolation from one another. The exceptions were the School of Education and the schools and the School of Education and the social agencies, especially Flanner House. Nevertheless, it was a very viable arrangement.

The *Urban Collage Weekend* was another component of the Urban Education Program. Its objective was to afford participants an opportunity for a brief but total immersion in the multi-faceted, inner-city culture. A typical weekend began at 1:00 p.m. on Friday and ended on Sunday afternoon. While activities varied from weekend to weekend, a typical weekend might include the following:

Orientation to the program and to the city of Indianapolis at Flanner House.
Observation in inner-city schools.
Visiting and/or eating in welfare homes.
Attendance at Southern Christian Leadership Conference, Operation Breadbasket Rally.
Attendance at a Black Arts Theatre and discussion with the cast.
Attendance at storefront and well-established black churches.
Accompanying a patrolman on his rounds in a police car.
Attendance at sessions of municipal court.
"Rap" sessions with a variety of individuals and groups.
Participation in surveys of inner-city neighborhoods.
Eating meals in inner-city restaurants.
Visiting inner-city bars.

With rare exceptions where "scholarships" were provided, each participant paid $15.00 for the weekend experience. This covered meals, lodging and some aspects of transportation. The list of participants included graduate and undergraduate students, faculty, staff, and administrators of the University, faculty and administrators of public schools, and representatives from homes and agencies in the community. Our records show that more than 200 persons attended these sessions.

The Urban Collage Weekends had considerable value in exposing individuals to the culture of the inner city. They also represented an excellent recruitment device for the Urban Semester Program. This was even more true in later years when the weekend program drew upon the semester program for its staff and ideas. Thus, each component of the Urban Education Program reinforced and was reinforced by the other components.

Multiple Arts Program

The Multiple Arts or Three Arts Program, as it was also called, offered a creative-concept approach to teaching music, art, and movement. It combined a graduate program for training specialists in the arts with a school program which integrated instruction in the three arts for elementary school pupils. The program was developed and implemented by professors in the School of Music, School of Education, and School of Health, Physical Education, and Recreation and by specialist teachers in the Monroe County Community School Corporation (MCCSC).

Conceptually, the program provides children with a way to understand, comprehend, enjoy, and use the arts in daily living. The program depends on exploration of media-sound, image, movement and their qualities—and ways of organizing them in time and space. The relatedness and differences of the structured elements of each art are emphasized and taught in an increasing spiral of experiences at each grade level. The structured elements of pattern and rhythm, time and melody, color and expression, simplicity and complexity of texture, form and design are examined by pupils through a series of participative experiences.

The Three Arts Program developed basically from three current theories: the theory of conceptual structuring, the theory of creativity in the classroom, and the perception-delineation theory of June McFee.[6] The theory of conceptual structuring emphasizes giving students an understanding of the fundamental structure through the presentation of basic concepts. The individual must be able to categorize his experiences in order to recognize the same concept in a slightly different form. In relation to this theory, the level of maturity determines the complexity of the learning experience.

The second theory is based on the assumption that creativity is the primary means of learning. The program offered experiences which made use of creative involvement as a means of acquiring concepts. The emphasis was on creativity in art, music, and dance rather than on performance.

The perception-delineation theory suggests several factors which affect an individual's art productions. These factors are readiness in terms of physical and perceptual development, the psychological environment, the ability to handle information, and delineation, which is based on readiness for perceptual experiences.

The program was designed to help children:

Understand the basic conceptual structure of each of the arts and the interrelatedness of the arts.

- Develop perceptual awareness by giving each student opportunities for experiences in perceiving, organizing, and using his conceptual information.
- Develop creative potential by providing successful creative experiences.
- Develop some skills for expression and communication in each art.
- Encourage enjoyment and satisfaction in the participation and use of these arts with personal involvement.
- Develop an ability to make aesthetic decisions by relating their own artistic creations to art in their immediate environment.

Instruction in the multiple arts was offered to graduate and undergraduate students during the regular academic year and in special summer workshops. Some of the expected outcomes for this component were:

- A sound curriculum in the fine arts from a cognitive-perceptual level and an experiential level for elementary school children.
- A cadre of public school teachers who are trained to teach a multiple arts curriculum and who can assist student teachers to implement such a curriculum.
- Fine arts professors who can conceptualize, install, administer, monitor, and demonstrate a multiple arts program.
- Classroom teachers more receptive to fine arts in the daily selection of learning activities and in the recognition that the arts are an important means to communicate human feelings and aspirations.
- Graduate students experienced in the use of a multiple arts curriculum and committed to introducing it in other schools and colleges.
- Special teachers available to teach and demonstrate before other special teachers enrolled in summer workshops.

The first interns entered the program in the fall of 1967 before TTT had [illegible]ed. During the second semester of the 1968-69 year, the program was initiated in Hunter and Elm Heights elementary schools. The staff, under the direction of the School of Music, consisted of 2 interns teaching 2 half days each week in each school. During 1969-70, the program was continued at Hunter School with two interns in a team teaching approach five one-half days a week.

In 1970-71 a combination of TTT funds and funds from Monroe County Community School Corporation made it possible to expand the program to a total of six elementary schools. Involvement had now grown to coordination among three Indiana University professors, six graduate students, and seven MCCSC teachers. The normal planning, performance, and coordination schedule for personnel was now five one-half days a week. Teams were developed in each school under the direction of the music teacher, who in turn, was assisted by the graduate assistants.

TTT involvement began in the summer with an extensive workshop under the direction of university faculty in the three arts method for the art, music, and physical education teachers of the elementary schools. All TTT funds provided in 1970-71, except for minimal workshop expenditures, were used to provide stipends for six graduate assistants in art, music, and dance. One MCCSC music teacher also received remuneration to serve as overall coordinator and supervisor of the program in the four TTT schools.

In 1971-72, the Indiana TTT Project provided funds to continue multiple arts in Broadview School due to the favorable response of students and the request of the faculty. If TTT had not provided the funds for the salaries of two graduate student instructors in the multiple arts, the program would have been financially impossible in Broadview School. Additionally, in 1971-72, the program operated in Hunter and Arlington Heights Elementary Schools with six specially trained student teachers in the areas of art, music, and dance; however, no TTT funds were involved in these two schools. In both situations the graduate and undergraduate students worked as a team under the direction of the elementary school music teacher.

The overall reaction to the Multiple Arts Program has been favorable. It was the consensus of opinion at a Participants' Advisory Board meeting in the fall of 1970, that extra effort was needed in training interns and school corporation personnel quite thoroughly before entrance into the program. This problem was solved through in-service seminars and summer workshops which were a unique and integral part of the program. In a few cases, some scheduling problems had to be alleviated; however, the combined effort of University faculty, school principals, and classroom teachers greatly lessened or eliminated this factor as a problem. An additional request was received from teachers to have the multiple arts more related to social studies and holidays without abandoning the interwoven framework of the three arts. This request was acted upon immediately by all concerned.

No program regardless of quality or acceptance is without its difficulties. The most serious handicap to the Multiple Arts Program has been in the matter of finance. Lack of MCCSC funds to employ certain specialists and lack of University funds, so heavily dependent upon federal funding, to buy intern time was and is, the most serious problem. Another handicap, although continually diminishing, is thorough training and understanding among all the participants in the program.

The Multiple Arts Program is presently an option for student teachers in the Division of Teacher Education and is operable in two schools. University coordinators are working with students in Early Childhood Education in a combined methods approach. In 1973-74, this same approach will be given to students in the Encore Program. There is a strong possibility that the program will expand into two additional schools that have music specialists trained in the original Multiple Arts Program.[7]

Secondary Mathematics Program

The Secondary Mathematics Program, originally called the Geometry Program, was one of the first two programs implemented by the Indiana TTT Project. Three of the four TTT parity groups were involved from the beginning. Included were university professors and students from the Mathematics Department in the College of Arts and Sciences, from Mathematics Education in the School of Education, and secondary school teachers of mathematics from the Monroe County Community School Corporation. Each of these groups was involved in an integrated program of working and learning together.

The objectives for the program were as follows:

To update the geometry content in the undergraduate teacher education program for prospective elementary and secondary mathematics teachers.

To update the content background of pre-service and in-service teachers and department heads by teaching the new content.

To update the content background of mathematics education faculty and graduate students so that methods instruction could be articulated with the new content courses.

To strengthen the high school and junior high school geometry curriculum and as a result, to improve teaching and the use of new materials by classroom teachers and student teachers.

Each group took the lead, with assistance from the others, in implementing different segments of the program. During the first year, when geometry courses were revised, the mathematicians assumed the leadership role. The teachers and a methods professor provided assistance by reacting to the revisions and discussing their implications for school mathematics. Some of the concepts which received added treatment in the revised courses include symmetry, transformations, elementary topological notions, convexity and vectors. During a "trial run" of the courses in the second year, a mathematics education professor, two graduate students, and several teachers "took" the course with undergraduate students in elementary and secondary education. Thus, all of the key participants in the program were brought up to date with regard to the new geometry content. As a result, the methods professor was better prepared to make parallel revisions in the methods course and the public school teachers better equipped to service the content needs of their student teachers. Moreover, the content of mathematics classes in secondary schools was also improved through the process.

During the second year, the methods professor, his graduate assistant, and the public school teachers gradually assumed greater responsibility for leadership, although the mathematics professor continued in the program to observe the impact of the new content in the schools. Immediately following the courses in geometry and mathematics methods, short meetings were held to plan and complete administrative arrangements for student teaching which was scheduled to take place during the first eight weeks of the second semester.

A second set of meetings, of longer duration and greater informality, grew out of the first. Held in the homes of the participants throughout the latter half of the first semester, these meetings enhanced the rapport of the students and supervising teachers. As the time for student teaching neared, it became apparent which prospective teachers would work most effectively with which supervising teachers and by mutual choice, they were paired with one another several weeks prior to the student teaching period. This gradual introduction of the student teachers to their supervising teachers and their classrooms, completely or partially solved in advance some of the problems usually associated with adjustment to the student teaching experience. As a result, the students felt more comfortable in their new roles as teachers and did a more effective job.

Supervision of the students was provided primarily by the classroom teachers. In addition, each student was observed by the program coordinator and his graduate assistant, and feedback was provided in after-school discussions.

From the students' point of view, the integration of mathematics content and methods better equipped them for their teaching assignments. Several used innovative teaching procedures and introduced non-standard mathematical topics. Two were able to teach full units in transformational geometry and others offered units in probability at two different grade levels.

During a program evaluation retreat held in late March 1971, there was general consensus that the program had been successful in achieving its objectives and that many aspects of it should be retained in future programs. The aspect of the program judged most successful was the close cooperation and rapport that had developed between the members of the group, particularly the teachers and student teachers. To many, this cooperation alone meant a greatly improved student teaching experience.

The program has continued to operate in subsequent years in much the same manner as it did when it first began. The mathematics courses have been installed as the "regular" courses in this sequence and probably will not require any immediate revision. The integration of methods and student teaching through informal contacts arranged in advance continues at the present time. Finally, discussions are currently underway to involve some schools and teachers outside the MCCSC system. In summary, the Secondary Mathematics Program has been a program in which the decision makers have been the implementors as well. While it was never envisioned as a large program in either numbers or resources, it has already served more than 50 teachers and student teachers. In the future, it is expected to provide a high quality program to even greater numbers of pre-service and in-service teachers.

Early Experience Program

The Early Experience Program began as a planning effort during the 1970-71 academic year. "Early experience" referred to the need of undergraduates to acquire firsthand experience in schools and other settings well in advance of the student teaching period. The rationale for doing so was to give them a sense of what schools and teaching were like long before they were asked to make a career commitment to teaching. The resulting early experiences—designed primarily for freshmen, sophomores, and juniors—were intended to lead to a decision not to teach or a more productive student teaching experience.

There are two courses in the School of Education at Indiana University that reach virtually every student in elementary and secondary education. One of these is Introduction to Teaching (F100) and the other is Human Development and Learning (P280). These are the only two multi-sectioned courses required of all undergraduate students. To insure implementation of the Early Experience Program that evolved from the planning, the professor-coordinators responsible for these courses were invited to participate in the early discussions of the program and the appointment of its personnel. From these discussions evolved a team of persons who would develop plans for the program. The team included not only professors and graduate students but teachers and community resource persons who were paid for their contributions. After one semester's deliberations, a report was prepared outlining objectives, field experiences, and academic experiences that were to comprise the program. Table III-6 below provides illustrations of these recommendations in four major categories: Personal,

Table III-6 Recommended Experiences

Objectives		Experiences in Schools & Community	Instructional Experiences
Personal			
F100 P280	Given a personal interaction situation, the individual can verbally state the feelings of another person	Observe several situations in the classroom, on the playground, and lunchroom and write a reaction to them. Check with the child or the teacher to attempt to determine the validity of your observation	Video-tape in classroom the different aspects of the role of the teacher. Use protocol materials for reaction, and small group role playing to demonstrate cause and effect.
Relating to Educational Theory			
F100	Given a specified list of matery skills, the individual can rate student progress in attaining them.	Develop a list of behavioral objectives and teach a child the specific skills in a subject area.	Mager "Behavior Objectives" Bloom "Learning for Mastery"
Relating to the School			
F100 P280	Given the parents served by a school, the individual will become aware of the importance of the teacher-parent relationship.	Observe a parent-teacher conference. Visit homes of parents.	Pamphlet on parent-teacher conferences. Film "Benny, Child Who Cheats."
Relating to the Community			
F100	Given the population area of the school, the individual will assess the socio-economic level and the ethnic and parental aspirations as they relate to the school.	Spend some time with the CAP field worker. Visit Headstart Program. Visit homes with social worker. Attend PTO meeting. Discuss children's problems with the nurse.	Read: "Slums and Suburbs" and "Impossible Revolution." Films: "The Way It Is," "Webster's Grove," and "Marked for Failure." Protocol material: "Tense Imperfect."

Relating to Educational Theory, Relating to the School, and Relating to the Community. The actual report carried several pages of recommendations under these categories.

During the spring semester, a limited program of early experiences was provided to students in elementary education. This field trial of the program provided many insights which were incorporated into a revised description at the end of the year.

Evaluation

In 1970-71, the "year of expansion," a half-time evaluator was employed for the TTT Project. The other half of his appoinment was paid for by the Department of Educational Psychology, for whom he taught courses in tests and measurement. The first semester of that year was devoted to developing rapport with staff and students of the programs and formulating with them a general approach to evaluation. The "evaluation model" that evolved from the process is displayed below.

In this model, evaluation is designed to provide a continuing flow of information to project personnel to enable them to make appropriate decisions. Decisions fell into one of three broad categories: (1) to continue the program as planned, (2) to revise the organization, curriculum, staffing, or other aspects of the program, or (3) to terminate the program at an appropriate point in time. Usually, decisions to revise or terminate were made within a circumscribed context. For example, the teachers in particular schools did decide to terminate their participation in the project, but the program continued in modified form in other schools.

The dimensions of the model suggest two major features of the evaluation effort. First, it was to focus on all levels of individual and institutional change. In this respect, it did parallel the original program objectives.

Figure III-1 Evaluation Model

Process Stages	Participants				
	Institutions	Individuals			
		TTT	TT	T	Other
Formulation					
Implementation					
Awareness					
Product					

Second, it was designed to operate through all stages in a program's development. Since some programs had begun prior to the formulation of the plan for evaluation, they could not be examined in their formulation stage. An exception to this was found in major program revision. Here evaluation could be and was made before and during the planning for or formulation of the revision.

Initially, the most important dimension of the model was the implementation dimension. Since two programs had begun the previous year and others were beginning concurrently with plans for evaluation, it was important to determine as a first step what the objectives and procedures of each component were and whether each was being implemented in the manner described. We hoped this would enable us to attribute results to specific dimensions of each program. "Awareness" refers to how knowledgeable the participants were about the objectives and procedures of each program. By participants is meant both trainers and trainees.

Although the "product" is generally viewed as the output of a program, we felt that even some aspects of this dimension could be tapped throughout the course of the project. For example, the products of a two-week seminar can be measured at the end of that seminar, and student performance as teachers can be measured at the end of each year or at other appropriate observation points.

Many readers will be aware of the similarity between this model and the so called CIPP model developed by Guba and Stufflebeam. The context, input, process, and product stages of the CIPP model do bear rough similarities to our process stages. Moreover, since Guba is at Indiana and he had been involved in the development of the TTT Program, we do admit to having been influenced by his thinking. In fact, the original TTT proposal called for the use of the CIPP model. When funds were limited, the decision was made to employ the simpler model presented here.

Since the project was already becoming quite complex and the evaluator was available only half-time, an early decision was made to focus most of his energies on the Professional-Year Program for several reasons. First, this program was one of two begun during the previous year. Second, it did represent a substantial investment of personnel and other resources throughout the course of the TTT Project. Furthermore, it did have TTT, TT, and T levels of involvement from three parity groups. Thus, it represented a kind of microcosm of the larger project. Finally, we were concerned about doing a careful job of evaluation in those areas in which it was undertaken. As a result, the data reported in other chapters of this publication was most frequently, but not always obtained from the Professional-Year Program. In any event, the decision accounts for the imbalance in the data collected from program to program.

III References

1 "Proposal for a Community Educational Center," mimeographed proposal prepared for discussion purposes and for submission to Lilly Endowment Fund, May, 1970, p. 1.

2 *Ibid.*, p. 2.

3 *Ibid.*, p. 3.

4 Schooler, Virgil E. and Lang, Duaine C. *Supervising Teacher: A Guide for Student Teaching,* School of Education, Indiana University, 1969.

5 Indiana TTT working paper, *Objectives for Urban Semester Program,* 1971-72.

6 McFee, June, *Preparation for Art,* Belmont, Calif., Wadsworth Publishing Co., 1961.

7 In addition to TTT documents and an interview with Dr. Miriam Gelvin School of Music, the following publications were used in the preparation of this section:

- Goetze, Mary and Sandra Mathias, *An Aesthetic Education Through Multiple Arts* (Practicum paper, School of Music)
- Goetze, Mary and Margaret McConaty, *A Multiple Arts Curriculum Structure: Music Portion, Levels I, II, III* (Practicum paper, School of Music)
- Backman, B., Bullard, S., and Newber, A., *A Description of the Intern Program in Three Arts 1968-1969,* (Practicum paper, School of Music)
- Wesley, Jane, *A Description and Evaluation of an Experiment in Teaching Creative Arts Methods to Elementary Teachers in the INSITE Program* (Unpublished thesis, School of Music)
- McFee, June, *Preparation for Art,* Belmont, Calif., Wadsworth Publishing Co., 1961.

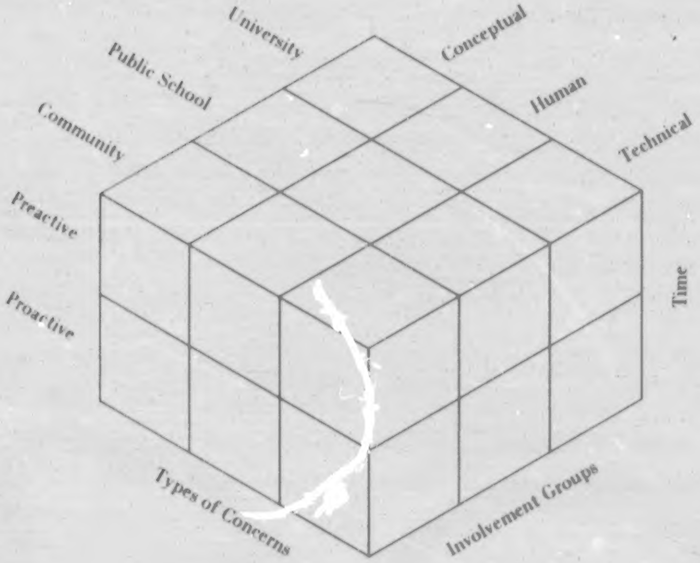
IV Implementation Issues and Concerns

It is one thing to conceptualize a program, to describe innovative features and list desirable outcomes. It is quite another matter to implement the program, make the innovative events actually occur, and concretely realize the established goals. There is considerable literature indicating that many publicized programs in public schools are far more "purported" than "real." Goodlad and Klein in *Behind the Classroom Door*[1] suggest that innovations in many schools have ghostly characteristics—hard to see, lacking in substance, poorly understood, shadows of their original selves. Gross, Giaquinta and Bernstein[2] as well as Provus[3] point out that the desired goals of programs often are not reached simply because the innovative treatments are not applied.

Participants who plan teacher education programs can write lofty statements about worthy goals, promising activities, and redefined roles. We all like to speculate about the "way it ought to be." The blueprint for change can be made to look good by citing research findings and quotations from prestigious others. When the time comes for all parties to work—to actually conduct activities, modify behaviors, and enact roles—participants often find the blueprints unworkable. Most of us are blissfully ignorant about how painful or personally discomforting our functioning in a new approach is going to be. Doubts arise during implementation over the most well thought out concepts championed during the planning period. Such doubts are intensified when participants are required to change schedules, invest more time, talk with outside educators, relinquish a portion of their power, and compromise their goals. However, it is only from these activities that education majors experience better teacher preparation programs and children experience improved teaching. Writing about new treatments may enhance the promotional dossiers of professors but writing, alone, brings no practitioner or institutional change. To implement change, the concepts undergirding the writings must be converted into observable, sequential, logically ordered, and competently executed units of work.

The implementation cube depicted below illustrates eighteen possible sources for concern in the implementation of field-based programs. The types of concern (conceptual, human, and technical) interact with the organizational groups (university, public school, and community) that are affected by the change. As change is a dynamic process rather than a static entity, problems in implementation vary along a time dimension (preactive or prior to implementation, and proactive or during implementation). The broken line dividing the preactive and proactive stages indicates that many issues and concerns are not exclusive to either one stage or the other. During the proactive stage, issues arise which were dealt with, postponed, or ignored in the preactive stage. In short, the frequency, type, variety and extensiveness of concerns, issues, and problems in the proactive stage have a direct relationship to concerns, issues and problems addressed or not addressed in the preactive stage.

Figure IV-1 Sources of Concern in the Implementation of a Field-Based Program



This cube provides the framework for the remainder of the chapter. However in order to avoid duplication and emphasize the interdependency of the material in each cell, the discussion will be organized around conceptual, human, and technical concerns. Time and organizational dimensions will be considered within the treatment of these concerns.

Conceptual Concerns

In many respects conceptual concerns are the primary issues of the preactive stage; nonetheless, there are conceptual issues which do plague university, public school, and community participants during the "doing" or proactive stage of program development. Quite simply, how extensive these concerns become in the proactive stage is in direct relationship to the number of viable solutions found during the preactive stage.

Questions which should be addressed by program implementors and which reflect various conceptual concerns of program development form the major sub-divisions of this section. While some questions focus attention upon the university and others clearly center on the public schools or the community, most questions directly or indirectly involve all participant groups.

Conceptual Concern #1: Has there been a meaningful involvement, commitment, and responsibility for community and school personnel in the conceptual phase of program development?

As stated, this question makes the assumption that a parity relationship should exist between universities, public schools, and the community. While we believe this to be true, a more fundamental question which must be answered is: What acts, events, inputs, and decisions give life and vitality to parity? For some individuals parity lies in planning and conducting an effort; for others, it is reacting to and modifying an effort; for a few, parity is accepting an equitable share of all the work connected with an effort. The implications of this issue are immense. Public school and community personnel, when programs are brought full-blown, have the prerogative to refuse to participate. Program developers and implementors then must go with whoever will have them. The result may well be that a program is tested in less than an ideal environment.

While the problems with a fait accompli approach are apparent, expecting public school and community personnel to involve themselves heavily in a teacher education project may also prove unrealistic. Professional-Year teacher participants resisted open, brainstorming discussions held to design program components. They wanted to be presented with well-structured alternatives to which they could react. The invitation to participate in the generation of alternatives was perceived as poor planning and unpreparedness on the part of university personnel. On the one hand, public school and community personnel understandably perceive the university carrying the onus of responsibility for the preparation of teachers and for the work involved in constructing special training programs. On the other hand, public school and community personnel clearly have expressed a desire to be meaningfully involved in the conceptualization of teacher preparation programs. Finding an appropriate creation-reaction-modification mix is the key to success. At any rate, implementors can expect public school personnel to be much more enthusiastic about telling them what is wrong with their plans and designs than they are in creating a design themselves. It has been our experience that though this is often a difficult period, public school and community personnel have a good deal to offer program development. If involvement levels are not frankly discussed, defined, and accepted at the point of conceptualization, public school and community personnel can always lay blame for a program's problems at the feet of the university. When public school and community leaders have in fact, had *their* preferred role to play in shaping the program, both groups are more inclined to work toward the solution of many unavoidable operational problems. Such parity relationships can be established but not easily, because of faculty unwillingness, inability, or lack of experience in cooperative teaming. Therefore, while one may be fortunate enough to get a team to conceptualize a program, implementors should realize that team problems are not over. Program unity will not emerge from staff disunity and individualism. It will only emerge from the concerted effort of many persons working together. We know of no simple blueprint for making this happen. It requires continuing effort and attention.

Conceptual Concern #2: Have faculty been identified who are committed to teaming to make the program's goals become a reality?

This issue involves finding personnel who are willing and able to cooperate as members of a close knit team. While this doesn't sound like much of an issue, it really is. Strong universities and the departments within them have been built in the past largely through the individual efforts of particular faculty members. Faculty teams have been few; rewards for teaming have been dubious. Currently, there is a strong need for cooperation between universities, public schools, and community agencies and persons in the preparation of teachers. This focus on shared responsibility has brought with it a need for university-school-community teams working together towards the attainment of mutual goals.

Because no one group is aware of all the things that are required by both school and university, a director is usually appointed to coordinate all of the components of the program, Eventually, university personnel begin to receive memos or engage in conversations with the director that lead to the relinquishment of some degrees of instructional freedom.

Differences of opinion are sure to arise. Joining a large program team and accepting the "close-up" leadership of a program director are acts that lead to memos, schedules for the use of program time, coordination with other classes and instructors, and obligations to implement staff decisions.

The Professional-Year staff has operated under a team structure with reasonable success. Classroom teachers consistently have rated the team leader's coordinative activities most positively; student teacher ratings are next most positive, and the ratings of university personnel are least positive. It is hypothesized that the ratings by each group are highly correlated with the amount of structure in which each group habitually works. To insure success, implementors must conceptualize the functioning of the team in the preactive stage and provide continuous in-service activities in "teaming" during the proactive stage. Very few staffs build such considerations into their plans and fewer yet do anything to achieve them. Those who would succeed in field-based programs must find constructive ways to deal with this issue.

Conceptual Concern #3: Have procedures been established which insure program stability in the event of personnel replacement?

To what degree can replacement personnel make major decisions about program characteristics? The original planners and implementors forged the program parameters after much conversation, confrontation, and compromise. Replacement people enter the program with little knowledge of that planning, the important issues, or the degree of past personal involvement represented. These replacement personnel often are expected to operate a program, not disseminate it; to support a program, not challenge it; to institutionalize a program, not build it. If replacements are allowed to make major changes in the program, many public school, university, and community persons will feel that their original input has been discarded; or the program will lose its identity and essentially become something else.

The replacement issue is particularly germane for new university personnel joining the program. They would have created something different had they been present in the conceptualization days and they are seldom enthused about running someone else's model. What type of replacement people will be sought? Creative builders? Non-leaders types? Beginning educators who think they want field-based assignments and who won't rock the boat? If replacement people are to be "executors of the given," should they not be fully informed of program characteristics, philosophies, and boundaries before they sign university contracts? Who is to determine what proactive stage modifications will be made? Who recruits placement personnel? The continuing members of the team may desire to recruit their own faculty but find that administrators far removed from the program have employed faculty with vague references to "working in the field." It is not until they arrive and are assigned that they realize what the job entails and they may or may not like it.

Teachers in Professional-Year schools have been the first to sense that unwilling, new professors or associate instructors have been manipulated into the program. The comment of teachers is "If this is such a good program, why aren't all those professors on campus volunteering to participate? Why do you employ so many beginning professors and doctoral students each year?

While the answers to these problems are not simple, we do have some suggestions to offer. First, the team members in field-based programs should have a strong voice in the recruitment and selection of new staff. They are the ones who are most familiar with the requirements of a particular position, and they will have to pick up the slack if a person does not live up to expectations. Under such circumstances, they have something to gain from presenting a reasonably objective description of the position. Moreover, the person accepting such an assignment is more likely to know what he is getting into.

The question of how much change to allow is a more difficult one to deal with. Funding agency personnel and the current team members have expectations about the nature of the program that place some constraints upon the type of change that can be made. However, some change is probably essential if the program is going to show continued improvement. Perhaps the best answer to the question is to permit newcomers the same opportunities to participate in the making of decisions as current team members in similar positions have.

Conceptual Concern #4: Have steps been taken to insure faculty participants that their involvement and contributions will be rewarded by the university?

University professors are well aware of the operation of their institution. While conceptual activities are rewarded in university structures, the hard work of putting ideas into operational form often is not. Whether the university will modify its reward system of promotion and tenure remains to be seen. Such change involves the whole university structure and will require strong leadership on the part of schools of education. Have you listened to faculty conversations—especially to the comments of untenured professors? Rarely a day passes without the expression of apprehension over promotion and tenure possibilities and concern for the best route to these individual goals. All are convinced that five solid research articles printed in prestigious journals are superior to a year of superb teaching in a field-based program. We hope it is different at your institution. If it is, you may more easily interest and retain promising young professors in field endeavors.

Conceptual Concern #5: Have reasonable benefits for all involvement groups been clearly identified?

A fifth issue dealing with conceptual concerns in implementation involves the university, public school, and community. This issue centers around the question, "Who is the program serving?" From the standpoint of the university, the program is first and foremost a teacher education program serving prospective classroom teachers, and in the case of TTT, other TT and TTT educators. Public school personnel often see the program not so much as a teacher training program but rather as a support program to assist them in their teaching function. The community is hopeful that the program will result in desired pupil learning. Here are some representative quotations:

> Professor: "The schools are fortunate to receive free in-service education, innovative curricular materials and continuing student teacher assistance through this program."
>
> Teacher: "Student teachers are the ones who get all the benefits out of the program while we get extra work."
>
> Parent: "My child has received much more individual attention and has done more creative things since our school joined the program."

While the focus of each group's attention need not be inimical to the others, understanding is required. Often such understanding calls for the reconstruction of certain program elements. At such times, a vehicle is needed with the capacity to move people outside their perceptual frameworks. Unless the needs of all are given serious consideration, the needs of any one are likely to go unmet. Planners would do well to establish one major goal for each group—university, public school, and community—and make attainment of all three goals top priority of *all* program participants.

Conceptual Concern #6: Have procedures been established which allow the program to accommodate needed change but which stabilize the conceptual model?

Very early in the implementation process, the staff is likely to struggle with the urge to trim the program to something that is easier to live with. In the Professional-Year Program, pressures arose early to bring many of the methods classes back to campus, to greatly decrease the number of supervisory conferences, to eliminate classroom demonstrations by professors, and to replace professors with teaching assistants. Justifying these compromises as evidence of flexibility or as evolving improvements represents a classic example of goal displacement. Convenience or some other objective replaces the original goals of the program.

Leaders in experimental programs may find themselves asking, "Is it not necessary to implement and evaluate the program's components before making decisions regarding their modification?" During the proactive stage, participants must pause to establish criteria that will both justify and shape program revision. Convenience, reduced working time, or comfortable return to familiar ways cannot replace hard evaluative data as reasons for program modification. There are people who jeopardize programs by their tenacious inflexibility; others turn programs into a collection of haphazard events by their willingness to entertain almost any alternative at any time. The degree of flexibility which can be tolerated in terms of program goals is an ever present concern that should be examined regularly. Often it is ignored. Burke[4] has likened innovation in education to a crew making modifications of an airplane's basic design while the plane is in flight. Changing the airplane to an ocean liner in flight can become even more trying. The way to an excellent program is a narrow pass with the slough of flexibility and the cliffs of stubborn rigidity on either side.

Conceptual Concern #7: Has a plan of evaluation been established and implemented which can assist staff decision making?

Evaluation has both preactive and proactive dimensions. During the preactive stage, a plan for evaluation is developed and objectives are established. The issue of whether to obtain formative data (Are the program treatments actually being administered, for how long, and how well?) or summative data (What are the results of the program?) must be met head on. Decisions must be made to seek behavioral data, attitudinal data or both. In addition, there is a need to tie evaluation to program objectives, identify target groups, specify behavioral criteria, decide sampling procedures, and delineate in advance the actions that will be taken on the basis of the data collected.

Educators often state that they evaluate; yet, no action apparently ever stems from the evaluation effort. The role of evaluation and of evaluators must be conceptualized. Too often teachers and university personnel feel evaluation is an activity to pacify the Office of Education, not a tool to assist and assess program decision-making. This is a very important conceptual concern. . It should be addressed in the preactive stage; it must be addressed in the proactive stage.

While a plan for evaluation was developed during the preactive stage of the Indiana TTT Program, it was not of immediate use during the proactive stage. First, the magnitude of the evaluation plan was in keeping with the size of the proposed program. When funds for the program were provided at one tenth the level requested, program needs took priority over evaluation needs, and only a small, informal program of evaluation was implemented during the first year. When a formal plan of evaluation was developed for implementation during the second year, it represented only a part of the original design. The point here is that evaluation has to be geared to the needs and magnitude of the training program.

A number of problems arose in the implementation of evaluation during the proactive stage. These centered about the types of data to be collected, the roles of various persons in the evaluation process, the difficulties involved in interpreting data and communicating its meaning to participating groups, and the uses to which the data was to be put. In some cases, individual program participants felt their evaluative input rarely led to a major modification or beneficial decision. Evaluators tend to employ means, standard deviations, and other statistics to identify areas of greatest concern, or strongest recommendation. Professional-Year personnel regularly made program changes based on the central tendencies of participating groups. But, individuals who want a change usually want *their* change. In such instances, it may appear—indeed may even be true—that the evaluator has not heeded their advice. What evaluation can and can't do, will or won't do, needs to be continually discussed throughout the course of the pro[illegible]t in order to develop a common frame of reference among the participants. This places the evaluator in the role of instructor or trainer, a role that is virtually ignored in textbooks on evaluation. We feel this is one of the most overlooked aspects of evaluation in field-based programs in teacher education. Both conceptually and operationally, it requires more thought than it has been given.

Conceptual Concern #8: Has an adequate dissemination plan been developed and implemented?

Once a teacher education program is in operation, there is a professional obligation for university personnel to share it with colleagues in other institutions. Public school personnel should demonstrate it to interested teachers, principals, and teacher educators. All parties should permit student applicants to view it in operation and to decide if it is the alternative approach that best serves their needs.

Program participants are generally so busy "doing" the project that they have no time to promote its replication elsewhere. Dissemination becomes a cursory, opportunistic activity done by everyone to a small degree and by no one to a thorough degree.

Dissemination activities can be upsetting: unannounced visitors in the classrooms, requests for written testimonials, only "half the story" descriptions floating throughout the school system. In the absence of planning, dissemination materials may be slanted. The "writer" on the staff manages to get out several articles, but they represent only his personal perception of what is going on. A strategy for dissemination must be planned by representatives of all the collaborating groups. Implementation of a dissemination strategy is an important contribution to teacher education but program members, if this task is to be approached eagerly, must acknowledge it as a legitimate portion of their regular work-load. More importantly, their superiors must recognize, allow time for, and reward dissemination efforts.

An organized plan for dissemination has been lacking in the Indiana TTT Program. Professors and doctoral interns have extracted research findings and published short articles out of their own hides. Writings have reflected the writer's major area of interest (mathematics methods, student teaching) rather than the integrated program. This book represents the first attempt to tell the total Indiana TTT story. No organized observation or demonstration days have been held. Rising classes of students discover the program through posters, fliers, word-of-mouth, and discussion sessions with friends, instructors, and the program director. Belatedly, in the fifth year of the program's existence, a slide-tape presentation is being developed for use with undergraduates, public school personnel, and alumni.

Teachers have not disseminated program characteristics and results in any organized manner except before their own school board.

Dissemination is not likely to occur until it is conceptualized and then translated into mutually acceptable tasks and events. The dissemination issue would be more critical in a large city system with many, many schools qualifying as field sites and "word-of-mouth" disqualified as a viable dissemination approach. In the interest of credibility, teachers, education majors, and parents should prominently supplement the dissemination activities of university personnel. It is likely that university personnel will more highly value field-based programs than public school people until public school personnel actually see the program in operation and witness classroom performance by preservice participants that is superior to the performance of conventional beginning teachers.

Conceptual Concern #9: Has the program's development and termination been conceptualized?

Programs die. Some die after a long and productive life; others, after a short, malady prone existence. Some program deaths are planned or at least anticipated; others come as surprises. University participants and public school personnel should conceptualize and begin the program termination process so that abrupt endings do not inconvenience or restrict the participants.

What is the most appropriate life of a program? Should universities continue to support successful innovations or should they drop them to save resources in order to encourage further experimentation? How long is an innovation an innovation?

How long should a field-based teacher preparation program be housed in one set of schools? Schools can be over saturated with professors and student teachers who are transients themselves although the program they represent seems to be a permanent fixture. The issue is sharpened by the fact that the cooperating school system, if small, is unable to employ any sizeable number of the "better" teachers produced through the field-based program. Teachers within the system have the task of producing "better" teachers for somebody else in distant school systems. The task is professionally satisfying but devoid of immediate, personal, local, observable benefits. While the pre-service teachers graduate yearly and the university staff changes often, the teachers find themselves the real veterans performing similar tasks annually in an aging program.

On the other hand, schools may be depending on student teacher input to operate special tutoring programs and other forms of individualized instruction. Snap decisions to terminate programs can eliminate important educational resources. Future working relationships between participating institutions and friendships between their personnel can be damaged by hasty disengagements. Education students scheduled to enter the program at the beginning of the next semester or year may discover that abrupt termination has left them with un-needed prerequisite courses, or caused them to be short of courses needed for entry into alternative programs.

Obviously, representatives of all the involved institutions must cooperate in laying this issue on the table and in generating a strategy to deal with it. At the local level, this means identifying appropriate stages in the program's life cycle and laying plans for making the transition from one stage to another. It also means facing up to what may well be some unpleasant decisions about when and under what circumstances programs are discontinued. At the national level, some consideration should be given to tailoring funding cycles to the needs of programs in different periods of their life cycles.

Human Concerns

Field-based teacher programs tend to be complex. They involve heterogeneous groups of educators and clients, greater number of participants, and once conceptualized, often are contaminated by the hard realities of both public school and university operation. Everyone who participates in such programs risks having his toes stepped on occasionally, his best laid plans mangled a time or two, and his ability to relate, smile, adapt, and compromise frequently taxed. Position descriptions have a way of changing or enlarging. Unanticipated operational crises determine how and where one's time is spent and, coupled with emerging needs of pupils and pre-service teachers, can mandate that staff members acquire new skills or use their time in unforeseen ways.

As a result of the uncontrolled and often unpredictable nature of the "field," a multitude of human concerns arise in the proactive phase of a field-based program. Several such concerns characterized the Indiana TTT Program. Although discussions of particular concerns may be brief, each concern has been related to participant morale, professional satisfaction, and program continuation. For this reason, each deserves the respect and attention of those who wish to implement field-based programs.

Human Concern #1: Have faculty roles and responsibilities been clarified at the university level and harmonized with the institutional reward system?

With program implementation comes the realization that participants will now have to operate under different rules and perform in significantly different roles. Faculty members are called upon to perform their educative roles in the public school setting. Not only does such a change necessitate doing without many of the support mechanisms available on college campuses, but involvement with heterogeneous clients is increased. Teachers and principals have stopped Professional-Year methods professors in the halls for a myriad of reasons. Student teachers linger after classes to request remedies for teaching ills. The program team is "where the action is" and very visible. It must give of its time if it believes in its own program.

University personnel who join a team dedicated to the implementation of a field-based teacher preparation program will soon find that they are entangled in behaviors seldom associated with the professional role. Performance as an instructor, a researcher, a developer, or a combination of the three characterizes the professional life of many professors attached to calm and conservative schools of education. However, if one accepts a position on a campus where innovations in teacher preparation are generated, a rich variety of additional behaviors often become a must.

For example, program participants must be recruited, especially where students have many training options requiring the exercise of intelligent choice. Potential public school sites must become aware of a proposed new program and its advantages. Employers of educational personnel must understand the option, perceive its strengths, and realize its uniqueness. These needs call for faculty members who have the time, patience, willingness, and ability to recruit and screen applicants and market the program and its student product. It is estimated that the recruitment alone, of 70 to 90 Professional-Year students requires from 100 to 120 man hours yearly. Evaluation of these students upon completion of the program, coupled with the preparation of placement recommendations, requires a similar number of man hours.

Many professors do not want to devote professional hours to dissemination, recruitment, interviewing, advertising, and job placement. If they elect not to involve themselves in these activities, no one is likely to do it for them. Not all of these activities can be delegated to graduate assistants either—nor should they be! Program applicants want to interact with the real program team; they want to size up the social-interactive characteristics of the staff with which they will work. They do not desire second hand briefings and they persist (at least in Professional-Year) until they can confer with the program professors or the director. This drain on faculty time is both painful and rewarding.

The professor who teaches a fixed number of class sections, in a specific room, at a specific time, rarely has to play the role of an advertiser, recruiter, interpreter, or placement facilitator. If innovative programs are to attract fiscally defensible enrollments and endure, these roles must be assumed, often at the cost of research and development time. The expanded roles that accompany innovation in teacher preparation can become both personal concerns and institutional issues. Recruitment of students for alternative projects and the competition between project teams that recruitment activities stimulate are new issues resulting in a standardized "dissemination package" in the Indiana University School of Education.

The definition of faculty work loads represents another aspect of this issue. Traditionally, professors find much of their work load defined in terms of the courses they teach and the research they do. They are accustomed to meeting two to four classes each semester in a given room at a fixed time. In campus classrooms, they have the sole responsibility and power to cancel classes, shorten classes, or substitute classes for independent study. Teachers and principals, however, function in a clock-governed institution where lunches begin and end on schedule and the special music teacher appears and disappears at given times each week. The public school educators expect professors not only to teach methods classes on schedule but to be available for the supervision of student teachers at predetermined times when the teachers can break free to converse with them. Frankly, professors prefer to operate "on call as needed" or to establish their own supervision hours in relation to other more crucial activities such as research and writing. Even the graduate assistants who accept supervision duties say, "We didn't come to the university to be placed on a daily work schedule; we came to escape that schedule." Public school educators find this notion of unscheduled time dysfunctional and often regard it as a ploy by which the university avoids investing in the program the manpower it promised.

Of one thing, we feel certain: conventional faculty loads derived from student contact-hour formulas no longer make sense. One faculty member commenting on his involvement in the program dogmatically declared, "It should be made clear that although there are part time assignments in the Professional-Year Program, they begin with a 150 percent involvement and proceed upward, and I'm afraid all the Dean notes is that I taught two course sections each semester." Work styles of the university and the public school are very different. Understanding is called for by both groups. Until universities equate supervision, in-service development, and student counseling with writing and research, most university professors will not readily engage themselves in what amounts to be, professional suicide. Meanwhile teachers will continue to say, "It certainly seems as if the program director and staff members could be in this school much, much more frequently."

Human Concern #2: Have roles and responsibilities been clarified among public school personnel?

Implementation of a field-based teacher education program necessitates the cooperation of public school and university personnel if the goals of the program are to be achieved. The roles and responsibilities of both groups are changed by such an effort. Parity between university and school personnel permits each to operate from its strengths in providing a conducive environment for preparing prospective teachers. If a cooperative relationship exists, both groups can grow together. Probably nothing is so offensive to public school personnel as the often "paternal" attitude expressed by many university professors towards them. The remarks of one concerned Professional-Year teacher illustrates the danger.

> As teachers, we have continually been asked for suggestions for improving the program. It has taken much teacher time to provide these suggestions. More often than not, our suggestions have been ignored. Apparently, methods people know of only one way by which to teach. In a large school where many different methods and techniques are used effectively, it is most disconcerting to learn that methods professors are telling students that their classroom teachers are not following the "right" classroom procedure.

To be successful, orientation programs must not be run in the traditional professor-student style. Discussion groups focussing on problems prove to be a much more viable route. Through this procedure, cooperative decisions can be made and the responsibilities of various personnel decided rather than dictated. In-service seminars carrying graduate credit and offered during the school day by methods professors have been used with some success to achieve change in teacher educational attitudes and performance.

Probably one of the knottiest problems in making program decisions has been in determining what in fact, constitutes consensus. Majority rule usually means that a minority does not believe the approach, technique, or procedure to be viable. Should everyone live by group decision? This problem imposes itself constantly – from school faculty decisions as to whether they will participate to program decisions as to the role teachers should play in the supervision of students.

Our position, though far from adequate, has been to back away from total teacher involvement as a result of majority decision but to continue to make annual modifications on the basis of majority decision. Clearly, decisions as to whether to participate in a cooperative venture must be personal, as opposed to group decisions. Professional-Year planners initiated discussions only in those schools where all or almost all of the faculty were likely to vote for participation. If two or three did not wish to participate, they did not have to do so, but the vast majority did have to volunteer to make the plan more feasible. Even so, we have the feeling that pressures from peers and principals produced some reluctant participants who became critical implementors. Even with the most agreeable group of participants imaginable, there is little likelihood of total support. Probably the best one can hope for is a critical mass of teacher support in a particular direction. A desirable relationship to be developed is one in which each group is able to reach the other in a spirit of give and take.

Another problem in the area of roles and responsibilities is the reluctance of public school personnel to open their classrooms to frequent visitation by university team members, student teachers, program directors, and evaluators. Field-based programs foster the invasion of rooms that previously may have been entered only by "the" teacher and occasionally by the principal. Most educators feel uncomfortable or apprehensive when they teach before observers, are the focus of a person who is using an observation scale, or when they attempt to demonstrate teaching techniques for the benefit of student teachers. University personnel may feel relatively comfortable observing and categorizing teacher and student teacher classroom action. However, they too find their anxiety level rising if called upon to demonstrate with elementary pupils before pre-service or in-service program participants.

Unless an openness can be cultivated between professors, teachers, and pre-service students, there will be little progress in producing new roles and responsibilities. Early in the program and regularly as well, various combinations of participants need to team in instructional activities. Video taping procedures can be used to facilitate group discussion of the results of such teaming. A spirit of, "We are in this together, we are looking for the answer, we all have strengths and weaknesses," must be developed.

University personnel should take the first step to demonstrate new techniques before teachers and solicit feedback. Their courage will be recognized and more than one teacher will then volunteer to try it themselves. However, don't assume that university faculty will rush to do these things. Feedback from pre-service participants over a three year period indicates clearly that demonstrations by university personnel inside public school classrooms have been extremely rare. To paraphrase classroom teachers and student teachers: "We observe that is is far easier for university people to talk about better ways to do things than it is for them to model their pronouncements." Unless university staff can freely enter public school classrooms to observe and comment on instruction and unless classroom teachers can enter the classrooms in which methods courses are taught, the unique contribution of each group may be lost.

Human Concern #3: Have undergraduate roles and responsibilities been clarified?

Field-based programs generally include and integrate university course work (methods, psychology of learning, foundations) with student teaching or internships in schools and community agencies. There is a tendency for academically minded professors to feel that course components are the most important part of a program; teachers, on the other hand, are likely to feel that student teaching is the most important component. Pre-service teachers usually are disposed to join the public school teachers and rate the student teaching work as more "real" than the course work.

Program implementors must be concerned with achieving an acceptable balance between pre-service teacher effort in methods courses and in daily teaching duties. Frequently pre-service participants have been heard to say: "We don't really need the methods instruction to meet our responsibilities in the classroom." "The methods activities are not relevant to my particular grade level or group of children." "I needed to work longer with children today but those methods professors gave me other things to do."

Attendance of pre-service participants during student teaching intervals tends to be exemplary. After all, their supervising teachers are accustomed to reporting to school daily, the children are always present, and the public expects its teachers to maintain continuous instruction. Yet, attendance of pre-service participants in the on-site courses is less exemplary. These classes can be cut more easily since they are still viewed as university courses, and back on campus class cutting is part of going to college. No parents are irritated and no children are left without instruction if an undergraduate decides not to attend methods class occasionally.

Pre-service participants also tend to prepare more for student teaching responsibilities than they do for course participation. Perhaps they feel their supervising teacher will be monitoring their performance closely and preparation is equated with survival. In methods classes, students assume that their colleagues share some of the responsibility and their personal participation or lack of it will go unnoticed. For whatever reasons, student teaching and internship assignments often are tackled with more energy, dependability, and conscientiousness than related course assignments of an academic nature.

A program staff should be concerned that academic quality is maintained in on-site courses. Field programs should not become totally non-reflective, non-analytical work experience featuring only modeling upon available public school or community personnel. Theory has a place. Examination of curricular and instructional alternatives has a place. Content has a place. Many of the "old" university programs have been deemed irrelevant to the real world of education. It is more likely that only parts of those programs were irrelevant. The executors of the new and supposedly more relevant programs must make sure that pre-service participants realize that there is no substitute for professional reading, critical thinking, examination of options, understanding of learning processes, identification of cultural values, and so on. Experience is not the total answer. If it were, there would be no ineffective, experienced teachers; no need for in-service education. One suggestion for the improvement of the Professional-Year Program involved: (1) assigning a pair of student teachers to one classroom for a full year, (2) providing the classroom teacher with a text for each of five elementary methods courses, and (3) permitting the teacher to assign methods text readings and to supervise the student teacher. Simplistic answers explain simple phenomena and are inadequate as operational models for teacher education.

Many times students have had little to say about the nature of their program. Students can feel as isolated in a field-based program as they can in large lecture halls on campus if they feel they have not had an adequate role to play in the decision-making process. On campus they essentially have only professors with whom to negotiate. In the field, teachers and administrators join the professors as demanders and defenders of structure and as buffers against student requests. Decisions must be made and programs designed and implemented in such a manner that the student senses his involvement and participation in the program. This issue can be resolved through adequate student representation in planning sessions. Increased student involvement and input into deciding upon relevant classroom experiences often bridges what appears to be dissimiliar goals. However, since field programs tend to take on more structure in each succeeding year, we recommend that prospective students be fully and accurately informed of the nature of the program and the non-negotiable responsibilities they must accept if they join the program. Alternatives for students can be provided by having alternative programs as well as alternatives within a program. Recruiters must insure that program candidates know which alternatives are available in each case.

Human Concern #4: Do community personnel clearly understand their role and responsibility in the program?

Once a decision has been made as to the quantity and quality of community experiences which should be offered, the problem arises of finding community persons to share the responsibility for this venture. Participation from the community's point of view often means that individuals have been given the opportunity to be heard. Although such a function is important, many neophyte teacher trainers become frightened, confused, defensive, and without a base of support, become further isolated from legitimate community concerns. What is needed is not so much a forum as a cooperative program in which the student is introduced to the problems of the community and guided toward reasonable solutions. This is a difficult arrangement to establish. What we have seen happening is communication between universities and communities and universities and schools. There is little three-way interacting. Conservative forces preclude joint community-school endeavors inside the school. Communication is a step forward but joint action is needed and not very evident. One approach taken in the Professional-Year Program was the establishment of special seminar days in which current societal issues were addressed by community, university, and public school personnel. University students and school personnel were free to attend these special seminars because they coincided with the school system's in-service days. Participation was required of student teachers and voluntary for classroom teachers. Few teachers chose to get involved. There was a feeling that social, economic, and civic issues have no relation to the classroom. The few teachers who did attend seemed well pleased with this approach. Much more must be done along these lines.

While these seminars promoted three-way dialogue, they represented an activity more on the fringe of the program than one dealing with the heart of the matter. As institutions, the schools and the university already have a long history of involvement in teacher education so there is some base to build upon. The ambiguous nature of the community, particularly in relation to teacher education, and the lack of precedents are difficult obstacles to overcome. While we achieved some measure of success in promoting community involvement, we never achieved a completely integrated set of shared responsibilities for all of the participants.

Human Concern #5: Have measures been taken to safeguard the educational program of pupils in the cooperating schools?

All too often programs have been built on the assumption that children are flexible and can take most anything thrown at them. Although we do not take issue with the concept that children are resilient, we don't think it is necessary to design teacher education programs to provide a deliberate test of the idea. Ideally, we should be able to improve the education of children as we improve the education of teachers. To achieve this ideal, school administrators and teachers must decide on specific instructional goals to seek with the help of the university student and faculty manpower available as a result of the field program. Then they must document pupil progress toward such goals. If there is no progress; or worse, if a decline occurs in pupil achievement, the special program must be revised or terminated.

With regret, we must admit that the Professional-Year resources have been employed by the schools primarily in the routine activities of "school keeping." Some new instructional materials were implemented through multiple arts and the individual efforts of methods instructors, but they were not broad programs of instruction for the entire school. As a result, little evaluation was focused on pupil progress. Opinionaires administered to teachers and occasional comments of parents and pupils suggest that the effects of the program were positive on balance, but no hard data exists to establish this point with conviction.

Why we were not able to achieve a broader program of instructional improvement in the schools is a complex question. In part, it was the result of our judgment to soft pedal the focus on school program in order to get into the schools. Rightly or wrongly, we felt the local schools were likely to resist efforts to bring about changes in school programs. Instead, we emphasized the training of teachers, including preservice and in-service, school and university. We also had the idea in the back of our minds that once in, we could raise the subject of school program with greater ease. Needless to say, this didn't happen. Just dealing with the many aspects of teacher education was a considerable task, and federal personnel–though interested in pupil growth–made it clear that funds would not be provided for school instruction. Thus our own failure to confront the issue, the natural resistance of school personnel, and the funding policies of the federal government all contributed to the outcome.

Human Concern #6: Have procedures been established to deal with questions of competence and incompetence among the participants?

A long-term field-based program featuring close personal relationships between university staff, public school personnel, and pre-service participants inevitably raises problems about the professional competence and performance of participants. University personnel work with a few classroom teachers that find teaching unsatisfying or an impossible challenge. However, the university group cannot become involved in the evaluation of teacher performance lest the campus-field relationship be destroyed as a result of charges and counter charges. This means that a few teachers will be retained in a field program even though they may not be suitable instructional models for pre-service participants.

A few professors or associate instructors may have difficulty in relating to pre-service teachers or classroom teachers. Their on-site courses may be poorly planned and conducted. Teachers feel, however, that they should not submit critical feedback to the university administrators who assigned those staff members to the project. Thus there is a tendency for all partners in the endeavor to tolerate each other's failures with plenty of break-time gossip and griping.

The "let's keep it as quiet as possible and wait until next year" approach is also used. Personnel changes may be effected behind the scenes. A new assignment is offered to a certain program participant by his or her department or division head. For rather fuzzily explained reasons, a couple of positions or responsibilities may be eliminated and the source of the problem disappears with the positions. The behaviors that produced the problem are not discussed by collaborating parties.

Dealing with staffing mistakes during the proactive stage is an explosive activity. Often there are not substitute personnel available for the remainder of the year. The goodwill and commitment of the floundering individual must be preserved. In education, every teacher, professor, and student has supporting colleagues—colleagues whose goodwill can be lost by tactless attempts to judge or modify their friend's behavior. Alienated sub-groups can terminate field working relationships by denying trainees access to rooms, by severing communication with other staff members, or by voting a program out.

From the very beginning of program implementation, in-service sessions concerned with retraining activities for all are needed. In these sessions, both desirable and undesirable program behaviors should be demonstrated and discussed. Through a school-university team approach, the incidences of personal failure can be reduced. It is also desirable to form a committee to deal, when necessary, with personal performance problems. This committee should include school administrators, university administrators, teachers, professors from the on-site courses, supervisors, and pre-service students. Any recommendations to a program participant should come from the entire committee and be a unanimous decision. Professional-Year has not utilized such a committee; we often have wished that we had. Neither have we found any viable way to obtain or fiscally support in-service training for the program team. In one year, when five of six methods personnel were new replacements, staff "miscasting," personality clashes, and lack of in-service assistance were almost fatal to the program.

Technical Concerns

Field-based programs bring many mundane worries to faculty members who never dealt with such worries while they were independent professors in conventional campus classrooms. Preparing and repreparing several versions of the next year's program is an inevitable chore facing "field" professors. Undergraduate and professor travel becomes a concern. Teaching space and equipment must be negotiated with public school administrators. One must always be aware of the differences between the public school and university calendars. Which staff member will check out a key to the public school and report early to open that school on a special holiday? Who will verify that every school door is locked at the end of that day—remembering that the custodian is observing the holiday? The point is, that when faculty members are given team freedom to operationalize an innovative program, they surrender routine services normally provided by units in the bureaucracy. Those units have rather strict but effective procedures for dealing with technical matters. Unit directors rarely care to learn the special procedures preferred by the program team. Therefore, if the team wants to humanize the operation, bend the rules, interject special features, change the timing, and so on, it must learn to deal with details, technicalities, and that much maligned "administrative trivia." It is not likely that a professor's promotions and tenure dossier will reflect one percent of the energy expended on technical matters, but without this expenditure the program will fail.

Technical Concern #1: Is the budget realistic for the program's goals and objectives?

Getting needed financial support is a major technical concern in the implementation of innovative programs of teacher education. Clearly such programs cost more. Because of increased costs many field-based teacher education programs have sought initial support from outside sources. This procedure provides the lead time needed to establish new budget priorities within the university. While this is clearly a positive aspect of outside funding it can also prove to be "a latter-day Frankenstein." Special support tends to give special program status. Such status all too often breeds the attitude that there is a "regular program," and an "experimental project." Much to the detriment of the project and its implications for change within institutions, isolation is often the result. One would be amiss to over-emphasize financial problems in the preactive stage. Usually monies are available because both universities and the federal government are in the habit of supporting new ideas. Financial worries really begin to occur in the proactive stage.

One of the most painful issues to be faced by a team charged with the management of a field-based program is the inevitable reduction of fiscal support when the university institutionalizes the program on "hard money." Innovative programs tend to be both innovative and effective because extra things are provided, extra components are included, extra manpower is invested, extra instructional materials are employed above the current norms characteristic of regular programs. Teachers appreciate and come to expect small "soft-money" stipends for planning meetings and evaluation sessions in the first years of federally supported programs. Professors expect and value graduate assistant aid, travel reimbursement for frequent trips to field sites, and the latest in commercial instructional materials. Program coordinators benefit greatly from funds used to bring in outside consultants and evaluators. These coordinators are able to devote considerable administrative time to the program, if their salary is partially grant supported, without worrying about shouldering a full university teaching load. Pre-service students value low student-instructor ratios, new curricular materials to manipulate, field trips, and many encounters with consultants from the community.

When the grant money ends, it is an exceedingly difficult task to obtain university money to maintain program components that made the program truly different—or that promote high participant morale and exemplary communication. There is a tendency to apply old instructional fiscal formulas to institutionalize an innovative program. To survive at all, the program staff has to prune out all sorts of activities and manpower that brought about the unique characteristics of the original program. These are the characteristics that attracted pre-service and in-service teachers in the first place. Serious questions can be raised as to whether innovative field-based programs are institutionalized. For example, some of the "cutbacks" that have occurred in the Indiana's Professional-Year Program in its first year of institutionalization include:

no graduate interns for the five methods professors. They once shared six interns annually, and these interns represented a "multiplier effect" since they were prospective "trainers of teacher trainers."

only two supervision specialists where there once were four.

no professor as evaluator when there once was a person assigned half time to this task.

no full or half-day paid workshops for teachers where there once were four or five each year.

no funds for the purchase of innovative instructional materials by methods professors.

no extra stipends for supervising teachers—but no reduction in teacher program responsibilities.

only 70 percent of needed reimbursement funds for local travel for methods instruction conducted in the field.

no money for outside consultants.

no travel money for professors to attend relevant, related research or dissemination conferences or to view similar programs in operation at other sites.

a 20 percent load assignment for the program coordinator in comparison with an original commitment of 80 percent.

considerable difficulty in obtaining funds to reimburse schools for consumable materials. What is a nominal cost when one or two student teachers are assigned to a school becomes substantial when 30 are present.

no secretary for the program when once there was an exclusive program secretary.

loss of adequate campus office space and a meeting room where program staff could meet as a "team."

At current levels of support for teacher preparation, we just are not going to construct programs as good as we know they should be. We cannot pay for all the necessary ingredients. Apparently a field-based program must be so successful during the golden, fully-funded years that university and public school faculties will work harder and suffer more personal discomfort in the institutionalization years just to keep it alive. Assuming that there always will be enough people to counteract the cutback of fiscal support with great investments of personal time is risky. University administrators must recognize that the institutionalization phase may be the one in which a program fails. Initiators and implementors of soft money projects must guard against making the programs too rich during initial stages of funding. They should limit the number of extra but superior components to be included. Reaction of fiscal pruners three or four years in the future must be anticipated and program components predicated on *new uses of traditional funds* rather than soft-money "pickups." It would be wise to involve ultimate financial decision-makers in the conceptualization of the program. No program costs should be hidden from them. Sooner or later the program will be shaped by fiscal officers; hidden expenses will come to light and will be eliminated. Early involvement of these decision-makers in the planning may give them time to modify fiscal support levels and procedures to avoid program emasculation during institutionalization.

Meaningful community involvement often brings budget problems which must be faced. University programs have no historical precedent for supporting community involvement. Unfortunately, no historical precedent means no university budget. While this need not be a problem when outside funding is available, it does present a problem for those who must convince administrators of the appropriateness of this category as a hard-line support item. For example, one Professional-Year course examines the roles of community agencies and their impact on schools. Although a faculty member is assigned to the course, community agency representatives are needed as part time instructors if the course is to be current and credible. However, administrators find it impossible to appropriate consulting funds for outsiders. No ways have yet been explored where the community agency people and the faculty member could trade off their time with no exchange of funds. It would seem that tradeoffs may be a needed avenue to meaningful community involvement.

Probably the most immediate budgetary problem is buying needed planning time. Faculty teams are now first realizing the amount of effort which must be devoted to planning. University administrators have unrealistic expectations in this regard. Many feel that a program will majestically take form overnight. Few are willing to pay for planning. It has been our experience that faculty positions are often filled late, new faculty brought on campus literally days prior to the commencement of a program, and office space not allocated until after the university program has officially begun. In August, 1972, 60 percent of the 1972-73 Professional-Year team was employed to arrive on campus ten days prior to total program resumption. Such administrative behavior mitigates against the development of a strong program.

A director of a field-based program must learn to live with ambiguity about the program's fate. He must also help teachers and university staff members to remain flexible and to maintain optimism about program continuation. Universities tend to make budgetary decisions slowly. Both teachers and professors would like to know in January or February whether they will have the opportunity to be program participants in the next year or not. Too often the answer is "Yes, if the program is funded. We won't know that until June or later. Remember, our state legislature hasn't made final appropriations yet. We haven't received any word from the Office of Education, either. Let's meet about this again in a month or two."

This ambiguity is a real concern to many professors who may have joined the university because they philosophically support field-based teacher education. Now, should they lobby for more conventional instructional positions next year? Should they accept another position elsewhere? Should they assume the program will survive?

Teachers want a program decision too. Other university options, especially those involving student teachers, may be available. If the program isn't to be funded, will they be informed too late to collaborate in one of the other options? Should they organize a school program around the possibility that student teachers will be an important source of educational manpower? Will the student teachers really be present next September? Such questions are a very understandable concern of public school personnel.

The program director must solicit public school participation in the program before he knows that the program is officially funded. He must recruit and orient pre-service participants even before he has commitments from public schools. He must accept the danger that financial constraints could terminate the program and apologies will be due dozens of would-be participants. All parties need to be flexible, optimistic, and tolerant of the way in which university decisions emerge. In fact, if all parties come forward united in favor of the program late in the academic year, they can often influence the funding decision. Exposure of all participants to the public school system and the university decision-making processes and time tables is an advisable proactive stage activity. While all this is true, program implementors would do well to prod the administration into making budgetary decisions earlier.

In many instances, the administrators don't have very much control of the process either. They must wait for actions at higher levels in the university or for budget allocations at the state levels before they can be certain that funds and positions will be available. In these situations, trust takes on increasing significance as an ingredient in faculty-administrator relationships. If faculty are confident the administrator is doing the best he can for them and that he will honor their requests if at all possible, then they are likely to wait out the situation with patience and optimism.

Technical Concern #2: Have university registration, tuition, grading, and similar "routine" procedures been adjusted to meet program goals and operation?

There is strong resistance to any change in registration, tuition, grading, and other "routine" institutional procedures in higher education. Much of what is "law" is "unwritten law," established to make someone's job a bit easier to perform. When such procedures are established to deal with 30,000 persons, or some large subgroup of them, routine is a legitimate device. However, standard university routines may present substantial roadblocks to experimental programs for reasons that are often difficult to anticipate.

The need to integrate the content of field-based courses in the Professional-Year Program provides an excellent illustration of this problem. Undergraduate students and in-service teachers detect considerable redundancy in such courses as mathematics, science, social studies, and language arts methods. Each professor offering these courses tends to deal with such topics as behavioral objectives, reinforcement techniques, classroom management techniques, learning theory, instructional diagnosis, and so on. Undergraduates are quick to complain that the same material is taught over and over again in four or five different courses by program instructors who never communicate with each other. "Are we having higher order questions again today?" is a favorite lower order question of Professional-Year student teachers. The supervising teachers who observe the undergraduate applying these concepts in elementary school classrooms also note the repetition and add to the litany of complaints.

Professors become sensitive to the complaints and recognize their legitimacy. A team approach to methods instruction evolves as a viable solution. Instructors plan common topics that are presented once to serve four or five methods areas. These academic offerings are programmed sequentially to span a full year. Essentially the students are enrolled in all five methods courses from August to May, systematically completing all team-selected units without the repetition that occurs when four or five professors plan and teach independently.

If this approach is to be followed, it would be best if the undergraduate enrolled in all the courses in August and received a final grade for each of the courses in May. However, university registration and tuition procedures are not designed to spread instructional offerings across an entire academic year. Rules limit the number of semester hours for which students can register. Semester hour limits may be exceeded slightly if permission is obtained from designated administrators and if extra tuition is paid. Students find both requirements distasteful. The designated administrators are far removed from the special program and are skeptical about wholesale exceptions to traditional registration rules.

Students can enroll in half the courses in August and receive grades and credit for them in January, but our experience has indicated that students may tend to coast, drift, and relax once the course is entered as completed on their transcripts. Awarding credit for a course half way through a course is dysfunctional even if the act does keep the registrar and the bursar happy.

Another approach is to award incompletes to all program participants in all of the team taught courses at the end of the first semester. This approach requires the completion of from six to seven hundred "Removal of Incomplete" forms at the end of the second semester. Secretaries who process student transcripts do not like to handle 600 "Removal of Incomplete" forms. Neither do the faculty. Currently, this *is* the method by which the staff of Professional-Year has turned five methods courses into an integrated, year-long, continuous instructional sequence.

These "Removal of Incomplete" forms are being processed as a favor to a particular program staff. Permission to use such forms in such large numbers must be requested yearly. No legitimate way exists to register students for up to 33 semester hours of integrated work in August to be completed in May. Semester systems, so common to most universities represent technical challenges to field-based teacher education programs that feature one or more years of on-site preparation. Not everything academic can or should be initiated and completed in 16 to 17 weeks, but registration procedures often make the semester appear indomitable.

Technical Concern #3: Have steps been taken to insure the attainment of program objectives within scheduling realities of public schools and universities?

University calendars and public school calendars may not coincide. For example, teachers may be on spring vacation during one week while university participants are vacationing during a different week. Unless these schedules are reconciled in some way, the program's staff may have far fewer days to offer instruction than it expected.

Field programs can be designed so that university students observe the same holidays as public schools. Such designs mean that professors cannot follow the official university calendar. Conflicts with other course obligations, committee meetings, and counseling appoinments may be many. The students may find fraternity, sorority, and dormitory facilities closed during university vacation weeks. The expense of special room and board arrangements during university vacation week is an added burden for students. Directors of field programs should anticipate working out a few days of special course instruction to bridge the differences in the annual calendars of the two institutions.

Some scheduling problems are inherent in the nature of the two institutions. While the operating procedures of most university faculty members permit and encourage adaptability and change, the daily routines of most public schools are much less flexible. Teachers constantly want to know with precision when students will be in classrooms, when activities will take place, and that what is suppose to happen is in fact happening. Most university faculty are not so organized. Often spur of the moment adaptations are made to meet the exigencies of a particular time. Since both groups have adopted these modes of operation for survival in their respective environments, change does not come easily. Convincing university faculty of the need to commit themselves to a particular schedule, while encouraging teachers to be as flexible as possible often proves inadequate, but the most that can be done without an extensive experiential base to draw from.

Technical Concern #4: Have space and equipment been obtained so that the program can be made operational in the field?

To date, the issue of facility use by university personnel in the public schools has not arisen, but it clearly has the potential of being a problem given the wide-spread proliferation of field-based programs. Instructional space and custodial arrangements are a serious concern in most public schools. Floor space will first be allotted to teachers, counselors, and administrators. If there is a surplus of classroom space, a field-based program from a university is welcome. However, that space is not guaranteed annually. Fluctuations in pupil enrollment can lead to the creation of more class sections and the need for more rooms.

Often the school that houses a field-based program consists of traditional classrooms, that is, rooms that seat thirty to forty pupils. These rooms make it impossible to assemble seventy to one hundred pre-service program participants for a large group presentation, a film showing, or testing. The size of student subgroups and instructional techniques employed may well be dictated by the physical features of the host school. The timing of program activities may have to revolve around the timetable for cafeteria cleanup, the use of the cafeteria for physical education classes on inclement days, and the schedules of music teachers.

The willingness of public school officials to issue school keys to university professors may govern the number of extra instructional sessions that can be held. The university personnel are guests inside the school facilities and do not have the direct control they have in their offices on campus. Most professors would like more guarantee of spatial arrangements than they have. There are many advantages in stocking a room used for on-site courses with instructional materials, bulletin boards, and A-V equipment. There is little advantage in moving materials and equipment to the most current "spare space." Don't despair though; the available instructional space in the public school is likely to be as permanent, large, and well equipped as the rooms you are frequently assigned on campus.

Technical Concern #5: Have procedures been established for the equitable use of the local public schools by various teacher education programs?

Monopolization of nearby schools and community agencies as field sites for a special program over a period of several years represents both a school and university issue. The issue is more germane to a small town where there are few buildings in the school district than it is to large cities. However, there are many large universities located in relatively small towns and this issue should be of concern to them.

Proponents of field-based programs go out into schools, build communications networks, create a collaborative program, and establish a working relationship with several faculties. If the program is successful, the school faculties elect to remain in the program from year-to-year. Most school faculties, if involved in an intensive and comprehensive teacher preparation program, do not choose to become involved in another program at the same time. Over time, the university staff of the first program acquires a monopoly on the teachers, administrators, and space in the original sites.

Meanwhile, the success of the first field program probably has stimulated the design of potentially more effective and innovative field programs. Staffs of newer programs need field sites, too. But, in small towns, the original field sites may represent a large proportion of all available schools. Planners of the new programs may not have enough "virgin" schools to approach concerning collaboration. These planners often resent the tight grip the first program team keeps on its schools and teachers. If schools are really few, the original team views the surrender of its field sites as suicide. A second generation program will move into the sites only if the original program is terminated. Such action does not offer more alternatives to pre-service teachers; it only replaces program A with program B.

Solutions to this dilemma are few if the School of Education is large. New and improved alternative programs are desirable. Are new programs to die in the implementation stage for lack of sites? Are they to be transported so far from campus that faculty refuse to participate? Are they to replace older, proven programs? Are professors to visit selected schools and attempt to persuade school faculty members to resign from program A to join program B? Perhaps, in small town settings, the life expectancy of each program should be established in the planning stage and termination should occur by agreement on a specific calendar date. Disadvantages do lie in this prescribed life approach. Who knows whether the newest program will match the effectiveness of the older and supposedly well evaluated program? Or, is it possible that schools surrendered by one group will soon be lost by another group and become disassociated from teacher preparation for several years.

This issue is very real. Within it are the seeds for friction, suspicion, resentment between campus program directors, project coordinators, directors of student teaching, and coordinators of observation-participation activities. All compete for entry into the same real world sites. The simplistic answer that "We were here first, five years ago," does not settle the issue. Neither does the retort, "Go find some new schools," when there are no appropriate schools within twenty-five miles or more. Few institutions have carefully considered the competition for, and over-utilization of, public schools in field-based programs. In Bloomington, both the public school system and the university have felt it necessary to appoint coordinators to deal with large numbers of petitions for university involvement in small numbers of public schools. Rather cumbersome bureaucratic measures have been installed to control and monitor the requests schools receive from field-oriented professors and university students. Site procurement is a problem frequently being recognized as a matter of formal negotiation by teacher organizations. At a time when field-based programs appear to be expanding, it will become even more of a problem before it is resolved.

Technical Concern #6: **Have procedures been established for the approval of research to be undertaken by persons not a part of the program's staff?**

When a small group of public schools are closely allied with a university program, they are often perceived as very convenient sites for research efforts by professors and graduate students who are unaffiliated with the program. In the past five years, many researchers have sought entry into the TTT schools. After all, the teachers there are an organized group and they have been conditioned to engage periodically in TTT evaluation activities. The undergraduates are intensely clustered in the schools at a very short distance from campus. They represent a most convenient population for research purposes. Then too, the program's university staff consists of people that can be encountered on campus and persuaded to support and possibly implement such research. Often the researcher is prestigous and it becomes politically unwise to refuse to cooperate.

Research external to the program often has no relationship to program activities and objectives. Initiators of the external research often want not only to use the "population" painstakingly assembled by someone else, but they want program staff to explain the unfamiliar research and enforce schedules for its completion. No matter whether the staff or the outsiders explain and administer the "treatments," public school personnel view the research as another requirement of the program. Resentment towards the nature of the survey questions, the time it takes to respond, meetings needed to communicate research objectives, and other burdens are taken out on the original program and its staff. It is not the independent researcher who tries to counter teacher complaints about one more long straw being deposited upon the back of the harried classroom camel. It is not the external researcher who faces dissatisfied undergraduates who claim their course work is a cover for the data gathering efforts of doctoral students or professional researchers.

Directors of field-based programs must face this issue early in the program implementation stage. They are going to receive the antagonism from teachers and principals if the field sites are allowed to be perceived as captive audiences for anyone's research. A system for the approval of research activities must be constructed. Teachers and principals must be involved in its construction. External researchers should be made aware of the steps required to gain permission to enter program schools. They should expect to make their own research proposal, in person, before the teacher groups to be involved. Each proposal should be identified clearly as: (1) an integral part of the program, (2) a related but supplementary part of the program, or (3) a non-program related, external activity. Of course, similar presentations should be made before all university people on the program team and before undergraduate participants.

The program director who monitors the observation of these procedures may be seen as an obstructionist at times by his campus colleagues in search of easy, economical solutions to their data gathering problems. It is better to risk this perception than to be described by public school personnel as one who is insensitive to, or a facilitator of, the exploitation of teacher time and energy. There will be years when participating schools cannot accommodate all the requests for research participation. The program director and staff may well have to tell campus petitioners that the "sites are closed" and suggest that totally different populations be sought. It helps collegial relationships if these issues and potential courses of action are discussed early in the implementation phase before specific requests are received.

Technical Concern #7: Have the topics or issues to be presented by community representatives been identified, sequenced, and articulated into the total curriculum of the field-based program?

Community representatives are readily available for employment as full-time or parttime team members and as regular consultants to field-based programs. The Professional-Year staff turned to representatives of lower income groups and ethnic minority groups for inputs to the teacher preparation process. Many of these community people interacted with undergraduates in psychology classes, introduction to teaching classes, methods classes, and student teaching. The substance of most interactions revolved around social and economic problems of low income groups and the insensitivity of schools, businesses, and the middle class to these problems.

While prospective teachers need to be much more aware of the problems, attitudes, and aspirations of low income groups; they require a depth of exposure to these topics, familiarity with their roots, and a realization of their generalizability. Depth of exposure has been difficult to obtain. Some examination of exemplary solutions to selected problems would be valuable, as well.

A limited viewpoint, repetition, and personal opinion characterized many community contributions to Professional-Year. Substantive discussions usually were restricted to conditions in the town or county. An undergraduate, graduate, or professional program participant who attended community-led seminars and rap sessions over a four semester period, for example, heard discussions of:

the 1970 campaign to substitute food stamps for commodities.
the quality of construction represented in low income housing.
the occasional insensitive management of a school free lunch program.
the higher school dropout rate of low income students.
the inspection policy associated with local government housing.
isolated cases of questionable disciplinary action taken by principals or teachers with low income pupils.
the need for a social, recreational, and work center in certain parts of town.
the lack of concern for low income children and their parents reportedly demonstrated by many teachers.
the need for low income people to develop a welfare rights organization.

The nine topics just cited were usually discussed at any seminar, whether on campus or in neighborhood centers, no matter who the trainees were or what the announced title of the seminar was. Thus, a pre-service teacher tended to hear the same rather superficial exposition of community problems as a sophomore, a junior, and a senior. Many undergraduates who sought "community interaction" reported back that all seminars they attended and all class presentations tended to be the same. Undergraduate interest in opportunities to receive instruction from community representatives tended to be high initially but to decrease as the instruction progressed.

Obviously community contributors to field-based programs must take the time to specify instructional objectives to be met. Activities to accomplish these objectives must be designed. Unstructured, unpredictable rap sessions are as likely to alienate pre-service teachers from certain segments of the community as they are to promote broader societal sensitivity. Community representatives on a program team must assume responsibilities for organizing a curriculum just as a mathematics methods professor does. Topics should be identified, activities described, internships established that undergraduates experience at certain times in their teacher education program. Some sort of check-off system is needed to route undergraduates through the community experiences in a logical, cumulative, non-repetitive way. Evaluative procedures are needed to determine whether participant attitudes and performance are altered as a result of instruction from community people and participation in community activities.

This technical concern has to be faced squarely by community people who want input to teacher education and who want official instructional positions on program teams. It is dangerous for university personnel to assume that the mere employment of a community person insures effective community-oriented instruction. It is naive for a community representative to equate telling about his or her life and problems with effective instruction or with a defensible curriculum component of a field-based program. It is essential that community instructors accept instructional planning and management duties that at first will be foreign and difficult for them.

Conclusion

A rather formidable delineation of issues, problems, and concerns has been made. Certainly many issues have not been touched at all in the discussion. The cube yields 18 potential categories of concern. Here are four issues not previously discussed in this chapter that nicely nestle into four different cells of the model. In reviewing your own program, rejoice if you find that it is impossible to identify any issues for several cells.

All of the cited concerns fall within the program implementor's zones of influence. Unfortunately, all of these concerns also fall within the zones of influence of other administrators at the university, the school, or in community agencies. This overlap in responsibility means that decisions will come slowly, meetings will become frequent, compromises will become inevitable, closure will become rare, and at times, progress will be barely perceptible. But, for those who persist, the reward is to witness some exciting stirrings in teacher education.

Rather than viewing this chapter as a collage of horrendous obstacles that defy progress, view it as a list of intriguing natural features in our educational world that are pliable and can be removed, modified, circumvented, or co-opted. If you are now accepting responsibility in an innovative teacher preparation program, our twisting track through the "field" may help you move quickly to identify and neutralize the impediments awaiting you. In this spirit, we offer to the program implementor, in checklist format, the concerns posed earlier as a guide to the implementation of change in teacher education. Talk about them. Provide for them. Add to them. Send us a revised and expanded checklist. From the collective experience of all will emerge more viable models for the improvement of teacher education.

Cube Cell	Issue
Human-Proactive-Community	Can articulate, energetic community people maintain their credibility and influence with their community peers if they assume university instructional positions? Will they be perceived as having defected to the other side?
Conceptual-Preactive-Public School	What basic position should the local teacher professional organization take toward the role of the classroom teacher in preparation of new teachers? How will the selected position influence the design of the field-based program?
Technical-Proactive-Public School	Can art, music, physical education, and other special schedules be adjusted at the school system level to expose student teachers and program professors to a balanced instructional day free of excessive interruptions and "down time"?
Technical-Preactive-University	How are the resources of staff time, travel money, and stipends provided *before* a grant is received to support the proposal writing team and the personnel who solicit initial school and community involvement?

Program Implementor's Checklist

Directions

For each item listed below, indicate whether you have or have not taken the necessary action.

Conceptual Concerns

1 Has there been a meaningful involvement, commitment, and responsibility for community and school personnel in the conceptual phase of program development?

Yes No

Comment*

2 Have faculty been identified who are committed to teaming to make the program's goals become a reality?

Yes No

Comment

3 Have procedures been established which insure program stability in the event of personnel replacement?

Yes No

Comment

4 Have steps been taken to insure faculty participants that their involvement and contributions will be rewarded by the university?

Yes No

Comment

5 Have reasonable benefits for all involvement groups been clearly identified?

Yes No

Comment

6 Have procedures been established which allow the program to accommodate needed change but which stablilize the conceptual model?

Yes No

Comment

7 Has a plan of evaluation been established and implemented which can assist staff decision making?

Yes No

Comment

8 Has an adequate dissemination plan been developed and implemented?

Yes No

Comment

9 Has the program's development and termination been conceptualized?
Yes No
Comment

Human Concerns

1 Have faculty roles and responsibilities been clarified at the university level and harmonized with the institutional reward system?
Yes No
Comment

2 Have roles and responsibilities been clarified among public school personnel?
Yes No
Comment

3 Have undergraduate roles and responsibilities been clarified?
Yes No
Comment

4 Do community personnel clearly understand their role and responsibility in the program?
Yes No
Comment

5 Have measures been taken to safeguard the educational program of pupils in the cooperating schools?
Yes No
Comment

6 Have procedures been established to deal with questions of competence and incompetence among the participants?
Yes No
Comment

Technical Concerns

1 Is the budget realistic for the program's goals and objectives?
Yes No
Comment

2 Have university registration, tuition, grading, and similar "routine" procedures been adjusted to meet program goals and operation?
Yes No
Comment

3 Have steps been taken to insure the attainment of program objectives within scheduling realities of public schools and universities?
Yes No
Comment

4 Have space and equipment been obtained so that the program can be made operational in the field?
Yes No
Comment

5 Have procedures been established for the equitable use of the local public schools by various teacher education programs?
Yes No
Comment

6 Have procedures been established for the approval of research to be undertaken by persons not a part of the program's staff?
Yes No
Comment

7 Have the topics or issues to be presented by community representatives been identified, sequenced, and articulated into the total curriculum of the field-based program?
Yes No
Comment

*This comment section may be used to clarify an affirmative or negative response, as well as communicate other difficulties encountered in the "yes/no" scale.

IV References

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V Program Impact on Individuals

Viable and lasting changes in teacher education cannot be produced through changes in structure and organization alone. Such structural changes often act as a subterfuge behind which the same old practices continue. If organizational change has had an impact, then that impact must manifest itself in people: how they perform, the procedures they follow, the attitudes they hold, and the ways in which they interrelate with their colleagues. For this reason, it seems highly appropriate to devote a chapter of this book to the topic of individual change.

Individual change in teacher education does not come easily. Professors, teachers, and students all have perceptions of the teacher's role which are translated into expectations for teacher behavior. These perceptions govern behavior in their own roles. Changing such perceptions is extremely difficult. One way to bring change about is to place persons in situations where old perceptions can no longer function or function as well. In such situations, individuals are challenged by the environment to perceive things in new ways and respond to them differently.

The figure below illustrates this view of individual change. It says in effect, "We act out of our view of the world." In other words, we act toward and react to others in accordance with a set of learned expectations. According to such expectations, professors are supposed to teach methods in college classrooms following a well defined format, and teachers are supposed to work with student teachers in prescribed ways. We do not expect methods professors to demonstrate in elementary classrooms or teachers to participate in methods instruction. Our expectations tell us how to implement a teacher education program– who plays what roles under what circumstances and with what results.

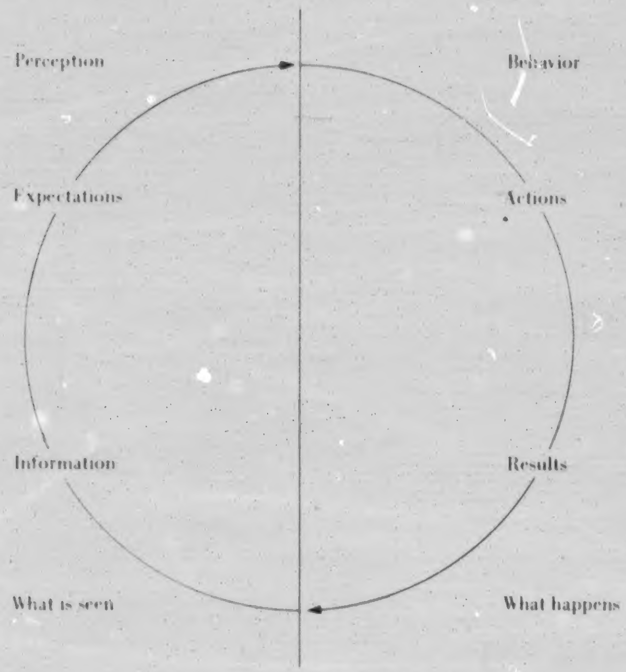
When a new set of circumstances prevails–that is, professors teach their methods in elementary schools and follow through with students during student teaching, then new expectations can evolve and new behaviors emerge. Teachers can make appearances in methods classes and professors can offer demonstrations with elementary pupils.

Changes in perception and behavior do not occur automatically with a change in the environment. True, fewer supports and less stimulation will be required to champion change among individuals who are already predisposed to change. Even then, changes will not occur for every individual in the situation. Many will continue to meet the new situation with an old set of expectations and behaviors. A model helps one to think about change and prepare for it; it does not guarantee it.

Note also that individual change is viewed as cyclic. A new situation encourages new expectations; new expectations give rise to new behaviors; new behaviors provide information for additional expectations, and the cycle begins anew.

The staff of the Indiana TTT Program has used a variety of evaluative surveys, scales, open-ended opinionnaires, tape recordings, and un-

Figure V-1 The Process of Individual Change



documented interviews over the past four and one-half years to monitor the process of individual and institutional change. Evaluative devices have established: (1) the degree to which a program activity or treatment actually occurred, (2) the attitudes of various sub-groups of participants toward the activity or treatment, and (3) the impact of the activity or treatment upon the professional performance of the target group. Results obtained from these frequent efforts have been used to modify and refine program components from year to year.

The data presented in this chapter has been collected exclusively from and on participants in the Professional-Year Program. As the largest program in both numbers involved and resources provided, it received the lion's share of evaluation efforts as well. Moreover, clearly established goals were available for each of the several target groups involved. For all of these reasons, the Professional-Year Program serves as an excellent vehicle to illustrate the documented results that have occurred in several groups of individuals.

So that the reader can be exposed to a realistic balance of negative and positive results and commentary, the authors have elected to present survey data obtained during the 1971-72, and 1972-73 school years. At the time of the 1972-73 survey, the Professional-Year Program was in its fourth year of operation. The original university staff that conceptualized and first implemented the program had "turned over" to such a degree that only the coordinator and one associate instructor (candidate for a doctoral degree) were the only university people attached to the program in December, 1972 who had been on the staff in December, 1971. In other words, in December, 1972 a young, new, inexperienced staff was operating a relatively "old" innovation that was entering the institutionalization phase under greatly reduced fiscal support.

Much of the data reported was collected at a time when teachers who had been program participants for three or four years were somewhat critical of the inexperienced university people working with them. Teachers felt they better understood what the program was and had been than did university personnel. They lamented the comfortable relationships lost when professors left the program to be replaced by assistant professors and graduate students. They were also disturbed by the evaporation of extra funds to undergird special planning conferences, evaluation workshops, and supplementary honoraria for working with student teachers. In many ways, December, 1972 marked one of the most problem-imparted months in the life of the Professional-Year Program. During 1969-70, problems undoubtedly were more numerous and more complex since the original concepts were then being put into operation for the first time. However, there was a vast reservoir of resources—soft money, senior university staff members, energy associated with Hawthorne Effect, peer encouragement, and counsel at Cluster meetings—to draw upon while arriving at solutions in 1969-70. Virtually all of these resources had been expended or diverted to other activities by 1972-73.

The reader is asked to keep in mind that the data that follow support the contention that a program run successfully once does not automatically recycle itself annually. Problems and concerns must be dealt with each semester and each year. Staff members with receptive attitudes and appropriate competencies must be selected to re-staff field-based programs. There must be time for replacement personnel to learn the intricacies of a program, to communicate with veteran participants, and to develop personal operating relationships that foster trust and confidence. Teacher trainers can not be viewed as interchangeable "jacks of all approaches" who can be assigned to Program A in one year and Program L in the next. Favorable evaluations received "last year" must be won anew "this year" and "next year." All participants must reflect frequently over the basic objectives of innovative teacher preparation programs—lest the real reasons for having the program become obscured, lost, or compromised. Presentation of a greater percentage of critical data and quotations is deliberate in this chapter. Readers will appreciate a revelation of problems and shortcomings and may ponder strategies to prevent or solve similar situations in their back home settings.

Traditionally, the impact of a teacher education curriculum was measured in terms of the immediate growth of the prospective teacher. This growth took many forms. Sometimes it was a change of attitude; at other times, it was the acquisition of a skill or ability; at still other times, it was the attainment of knowledge. Although this focus on the prospective teacher remains a worthy one for studying the impact of a teacher education program, it proves inadequate in light of the expanded objectives of the TTT Program. The objectives for the Professional-Year Program focus on the needs of TTT, TT, and T level individuals. They are presented below.

Undergraduates (T's)

To better prepare prospective elementary school teachers by increasing their involvement in the school environment;

To better prepare prospective elementary school teachers by integrating methods course work with classroom experiences;

To better prepare prospective elementary school teachers by increasing the base of supervision.

Classroom Teachers (TT's)

To increase the classroom teacher's awareness of, responsibility for, and role in the preparation of prospective teachers;

To increase the classroom teacher's awareness, understanding, and knowledge of current instructional processes;

To increase the classroom teacher's awareness of the needs within teacher education.

Graduate Assistants (TT's and potential TTT's)

To better prepare prospective teacher educators by increasing their awareness of needs within the public school milieu;

To better prepare prospective teacher educators by increasing their awareness of needs within teacher education.

To better prepare prospective teacher educators by increasing their awareness of the need for an expanded field and institutional base in the preparation of classroom teachers.

University Professors (TTT's and TT's)

To increase the methods professor's general awareness of the needs of the public school milieu;

To increase the methods professor's general awareness of the need for an expanded field and institutional base in the preparation of teachers.

A clear measure of the impact of the program is simply a measure of how well these objectives have been attained for each of the sets of individuals identified. Subsequent sections of this chapter examine the results achieved with each of these groups.

Undergraduates

Ninety-two college seniors participated in the 1971-72 Professional-Year Program. All participation was voluntary. Among those attracted to the program were persons who wanted to student teach in the vicinity of the university, persons not satisfied with on-campus programs, and persons who felt a field-based program would offer experiences which would better prepare them for their future career role.

Students tended to be a homogeneous group. Without doing injustice to the data, the Professional-Year student teacher can be described as a white (91 Caucasians; one non-Caucasian) twenty-one year old female (86 females; 6 males). To obtain more information about the undergraduate students a Personal Opinion Scale was administered. The results of this survey reveal that students in this program saw themselves as friendly, helpful, and outgoing. This data supports the conclusion that the Professional Year Program attracted wholesome, well-adjusted students, not unlike those generally found in teacher education programs.

Undergraduates were surveyed also regarding their educational beliefs. The results of this survey are summarized in Table V-1. An analysis of these response patterns indicates that these undergraduate students believe that:

education is a process undergoing constant change.

Table V-1* Educational Beliefs Scale-Undergraduate Mean Scores

Response categories

1	*Disagree very strongly*	*5*	*Agree*
2	*Disagree strongly*	*6*	*Agree strongly*
3	*Disagree*	*7*	*Agree very strongly*
4	*No opinion*		

	Statements	Mean response scores
1	Schools of today are neglecting the three R's	2.1
2	The backbone of the school curriculum is subject matter; activities are useful mainly to facilitate the learning of subject matter.	3.5
3	Learning is experimental; the child should be taught to test alternatives before accepting any of them.	6.0
4	The curriculum consists of the subject matter to be learned and skills to be acquired.	4.7
5	One of the big difficulties with modern schools is that discipline is often sacrificed to the interests of children.	3.1
6	Education and educational institutions must be sources of new social ideas; education must be a social program undergoing continual reconstruction.	6.2
7	Right from the first grade, teachers must teach the child at his own level and not at the level of the grade he is in.	6.5
8	Children must be allowed more freedom than they usually get in the execution of the learning activities.	5.9
9	Teaching would be a wonderful occupation for anyone.	1.2
10	I enjoy teaching.	5.7

*Each table in this chapter presents several survey items and the mean responses to those items. Thus, a score of 5.9 for item 8 of Table V-1 reveals a mean response between "agree" and "agree strongly" (points 5 and 6 on the scale). Actually, the mean is very close to "agree strongly." For each table, the mean response must be interpreted in relation to the scale reported with that table.

schools should be a place where children can have freedom in the execution of learning activities.

children must be approached as individuals.

teaching is generally an enjoyable experience.

Undergraduates do not believe that:

the schools are neglecting basic skills.

subject matter and discipline take precedence over children.

teaching is an occupation that anyone can enjoy.

Taken collectively the views expressed by these students seem to reflect the mainstream of educational thought. This data adds further credence to the conclusion that Professional-Year student teachers are fairly typical young professionals. Although the program designers felt that a "different" program would attract "different" students, such did not prove to be the case.

Undergraduate Objective One: to better prepare prospective school teachers by increasing their involvement in the public school environment.

This first objective was partially achieved by the organizational design of the program. The program lasted for the entire academic year and afforded students with extensive opportunities for involvement in the public school environment. Students received their methods instruction (language arts, social studies, science, and mathematics) three half-days each week. Each class meeting consisted of a three hour instructional block. During this three hour block, students received instruction in two methods areas. For half of the student group, first semester instruction was in language arts and social studies; second semester instruction was in science and mathematics. For the other half of the group, first and second semester instruction was reversed. All methods classes were taught in the public schools. This arrangement allowed the undergraduate student to have additional opportunities for meeting with supervising teachers and for working closely with elementary school children.

In addition to their methods involvement, undergraduate students taught for the entire year. Students were in elementary school classrooms, five half days each week. Further, students were given charge of the classroom for a period of two full weeks at the end of the first semester and four full weeks at the end of the second semester. Because the program was conducted in public schools, students had the opportunity to teach at a variety of grade levels in differing school settings. All students changed supervising teachers at the beginning of the second semester. Approximately 40 percent of the students also changed supervising teachers and grade levels at the end of the first eight weeks of the first semester. These students had experiences at three (rather than two) different grade levels with three different supervising teachers. Few would disagree that taken collectively, experiences such as these represent much more involvement in the school environment than is offered by conventional teacher education programs.

The breadth of the involvement in the school environment was also increased by the design of the program. As part of the requirements of the program, students were to familiarize themselves with several community agencies. Students participated in six or more community activities of their choice each semester. Further, students were encouraged to attend an inner-city weekend experience in Indianapolis. This "Weekend Collage" included staying overnight at a settlement house, meeting with various minority groups, touring the city with the police, and more generally tasting life in the inner city. For another period of one week, students were bused daily to and from Indianapolis. For two days of this week, students met with various minority groups to discuss the problems articulated by these groups. For the remaining three days, students visited inner city school classrooms, observing teachers and working with children.

A Community Experience Questionnaire was administered to solicit student views. The results are recorded in Table V-2.

Table V-2 Community Experiences Questionnaire-Undergraduate Mean Scores

Response categories

1 Disagree very strongly
2 Disagree strongly
3 Disagree
4 Agree
5 Agree strongly
6 Agree very strongly

Statements	Mean response scores
1 I found the various community experiences to be very interesting.	4.4
2 I found the inner city school experiences to be very interesting.	5.1
3 Reflecting about all the community and inner city experiences, I would say that they have helped me become more aware of diverse factors which influence the lives of elementary children.	5.1
4 I think the university preparation program for student teachers should include diverse opportunities for inner city, community, and follow-up experiences.	5.0

This data suggests that while the students preferred their inner city classroom experiences, they believed that community experiences generally should become an integral part of a teacher training program. In light of the fact that these students felt that such experiences helped them become more aware of the diverse factors which influence the lives of elementary children, few could take exception with this conclusion.

The depth and breadth of the involvement of the students in the school environment speaks to a well-planned program and a very busy year. One student, commenting on the level of involvement demanded by the program, said with a smile, "I want you to know, this program has managed to effectively destroy all the social possibilities of my senior year in college." This same young woman subsequently applied for, and obtained, a very desirable teaching position in a southwestern city with hundreds of applicants for the openings in its school system. Students acted and perceived of themselves as teachers. With this realization came the further realization that they had voluntarily given up their last year of college life.

Undergraduate Objective Two: to better prepare prospective elementary school teachers by integrating methods and classroom experience.

As was previously noted, the program's design called for the methods courses being taught in the public schools. This design afforded multiple opportunities for the integration of methods and classroom experience: elementary pupils could be brought into the methods classes for the purpose of demonstration teaching; demonstration teaching could take place in elementary school classrooms; teachers could be invited to participate in methods classes. By having methods instruction in the public schools, students could make an immediate application of methods principles in a real classroom. The proximity of the methods classes to the real world had the potential for stimulating a continuous interchange between professors, students, and teachers. Proximity, however, does not always produce desired results. Table V-3 summarized the frequency of interchanges which were perceived to have occurred.

This data indicates that many of the opportunities afforded by the program were not used as much as would be expected.

A second measure of the integration between methods and teaching involves the extent to which methods instruction was perceived by students as preparing them for specific teaching functions. Student responses to this question are summarized in Table V-4.

Table V-3 Frequency of Interchanges-Undergraduate Mean Scores

Response Categories
Infrequent 0 1 2 3 4 Frequent

Statements	Mean response scores
1 Student observation of demonstration teaching performed by a professor.	0.4
2 Student observation of demonstration teaching performed by a graduate student.	0.2
3 Student observation of a student teacher performance.	1.8
4 Student observation of supervising teacher performance.	2.6
5 Demonstration of techniques, styles, materials by supervising teachers in classroom.	2.0
6 Demonstration of techniques, styles, materials by professors and graduate assistants in methods.	2.9
7 Integration of methods into elementary teaching.	2.7

Table V-4 Methods Preparation Questionnaire-Undergraduate Mean Scores

Response categories
No preparation 1 2 3 4 5 Complete preparation

Statements	Mean response scores
Did your methods classes prepare you for the following things?	
1 Understanding of children	3.7
2 Understanding of instructional processes	4.0
3 Use of alternative curricular materials	4.3
4 Skill practice in the classroom	3.9
5 Solutions to daily classroom problems	3.4
6 Classroom management techniques	3.5
7 Adapt lesson to level of students	3.7
8 Motivating pupils	3.9
9 Use of question asking strategies	4.2
10 Wrapping up or closure of lesson	3.2

Interestingly, from the standpoint of the student teacher, methods instruction provided a fair amount of preparation for specific teaching tasks. While students felt prepared by the methods, in light of the data presented in Table V-3, this feeling was not the result of extensive observations and demonstrations by methods professors and interns in elementary classroom situations.

The amount of coordination between methods instruction and classroom instruction is also indicative of the extent of integration which was perceived to have occurred. Student responses to coordination are recorded in Table V-5.

According to this data, students perceived a fair amount of coordination between the methods courses and related classroom experiences. One gets the feeling that generally student teachers felt methods instruction was attuned to the realities of their classrooms. In light of the data reported in Tables V-3 and V-4, such a finding is at best enigmatic. While there was little attempt on the part of the instructional staff to use the classroom as an on-site learning laboratory, the experiences which the student had in the classroom obviously made methods instruction meaningful.

In summary then, a field-based program clearly does provide extensive opportunities for the integration of methods and classroom instruction. Some avenues to integration are under-utilized and may require more specific efforts to stimulate their use. This appears particularly true of demonstration teaching by professors and graduate student interns. Even so, the methods classes were perceived as relevant and meaningful. Perhaps the student is able to build his own bridges between methods and teaching when given the opportunity to do so.

Table V-5 Methods Coordination Questionnaire-Undergraduate Mean Scores

Response categories
Poor 1 2 3 4 5 Good

Statements	Mean response scores
1 How well did the methods classes prepare you to apply methods to the classroom?	3.8
2 How well were the methods classes coordinated with classroom teacher instructional plans?	3.2
3 How well were the methods classes coordinated with elementary teaching activities?	3.1
4 How well in general were methods classes coordinated with student teaching?	3.7

Undergraduate Objective Three: to better prepare prospective elementary school teachers by increasing the base of supervision.

Traditionally the supervision of student teachers has been the responsibility of the classroom teacher along with well-intended but infrequent visits by college personnel. The Professional-Year Program attempted to up-grade both the quantity and quality of supervision in two ways. First, not only were more people involved in supervision but they were involved in a wider variety of ways. Methods instructors and graduate assistants were assigned direct supervisory responsibilities for specific student teachers. In addition to assigned supervisory personnel, additional personnel were designated as "floaters." Student teachers could contact these floaters as needs arose. With thirteen people involved in supervision, it was not uncommon to find two or three supervisors in a building at the same time. One student, who was the focus of much supervision, exclaimed, "Quite frankly, I have more supervision than I know what to do with!" While this may have been the case for some students, it is an encouraging sign of long-awaited change in teacher education.

In addition to involving more personnel in supervision, the "teaching clinic" was introduced as a means of improving the quality of the supervision. Each teaching clinic was composed of nine members; a supervisor, four student teachers and their four supervising classroom teachers. Each student teacher videotaped herself on a scheduled basis, usually once every four-week period. Clinic meetings were held to jointly discuss and share observations.

To evaluate the effectiveness of the teaching clinic, student teachers were asked to respond to a questionnaire. The results of this survey are summarized in Table V-6. It should be noted that the data is based on the staff's very first semester of effort at conducting teaching clinics. In general, the responses suggest that student teachers viewed the initial clinics as being of some value to both themselves and their supervising teacher. Although student reaction to the teaching clinic was less than enthusiastic, it is interesting to note that students perceived the teaching clinic to be at least as effective as "traditional mechanisms" in providing guidance. Students appear to be saying in effect that while the teaching clinic is a step in the right direction, a good deal more must be done. They are also saying "We are as busy as can be in our classrooms and we don't have time to participate in after-school or planning-period clinics." Unfortunately, few public school educators, whatever their status, perceive any available time to analyze their own professional performance.

Since the program was meant to improve both the quantity and the quality of the supervision, student teachers were asked to evaluate all forms of supervision received. The results are summarized in Table V-7.

This data suggests that a program which provides opportunities for certain occurrences to happen organizationally, does in no way guarantee that

Table V-6 Teaching Clinic Questionnaire-Undergraduate Mean Scores

Response categories (Statements 1-3)
Very little 1 2 3 4 5 A great deal

	Statements	Mean response scores
1	With respect to this clinic, I participated ____	3.6
2	I found this teaching clinic to be of ____ interest.	3.0
3	I found this teaching clinic to be of ____ value to me.	2.9
	Response categories (Statements 4-8) Disagree 1 2 3 4 5 Agree	
4	I think the teaching clinic improved the supervisory skills of the student teacher.	2.7
5	I think the teaching clinic helps to refine the teaching skills of the student teacher	3.2
6	I think the teaching clinic is a good way to become aware of the relationships among various teaching skills.	3.4
7	I don't think the teaching clinic is a good way to get feedback on one's teaching.	1.4
8	I don't think the teaching clinic is as effective as the traditional mechanisms in providing guidance to the student teacher.	1.5

Table V-7 Supervision Questionnaire-Undergraduate Mean Scores

	Statements	Mean response scores
1	Of all the times that you were observed, after how many of them did you receive feedback? *Never 1 2 3 4 5 Every time*	3.8
2	Of what value was the feedback to your own teaching? *Minimum value 1 2 3 4 5 Great value*	3.9
3	Of what value was the video taping? *Not very beneficial 1 2 3 4 5 Very beneficial*	3.6
4	Generally, I felt that the quality of the classroom teacher supervision ____ as the year progressed. *Did not improve 1 2 3 4 5 Markedly improved*	3.5

the event will occur instructionally. Although student teachers were frequently observed by supervisors, they did not always receive desired and presumably needed feedback. Informally, teachers often expressed the feeling that such feedback would have been beneficial. Their responses indicate that they believe the quality of supervision can be improved. We can only concur with this observation.

Undergraduate Summary

While certain objectives of this program were perceived by undergraduates to have been achieved to a greater degree than others, it seems worthwhile to look at how the undergraduates felt about the program generally. The results of such a survey are summarized in Table V-8.

This data suggests that student teachers strongly advocate a program such as the Professional-Year Program. Data such as this seems especially powerful in view of the frequent criticisms heard of on-campus teacher training programs. Although we would be amiss to suggest that student perceptions alone provide an adequate justification for the existence of field-based programs, we do take pride in knowing that students perceived the program as relevant to their career goals.

Table V-8 Professional-Year Program Evaluation-Undergraduate Mean Scores

	Statements	Mean response scores
1	The general program objectives for the program were ____. *Not clearly defined 1 2 3 4 5 Clearly defined*	4.2
2	Generally, I feel that with respect to student teachers in other programs, the student teachers in this program were ____. *Much poorer trained 1 2 3 4 5 Much better trained*	4.6
3	The amount of time I spent in the program this year was much greater than the reward I received from the program. *Strongly agree 1 2 3 4 5 Strongly disagree*	4.2
4	My personal feeling is that the program was of ____ to me. *No real value 1 2 3 4 5 Great value*	4.7
5	If I could live this past year over again, I ____. *(1) Definitely would choose not to participate in the program.* *(2) Probably would choose not to participate in the program.* *(3) Probably would choose to participate in the program.* *(4) Definitely would choose to participate in the program.*	3.7

Classroom Teachers

Forty-eight classroom teachers participated in the 1971-72 Professional-Year Program. Classroom teachers were located in three elementary schools in Monroe County, Indiana. Of the 48 teachers, 47 were married, widowed, or divorced. One was single. Table V-9 provides a graphic illustration of all classroom teachers by age.

Table V-10 illustrates that on the average classroom teachers had 13.5 years of teaching experience. Close perusal of the data indicates, however, that 40 percent of all teachers had from one to five years of experience.

This data, when contrasted with the classroom teachers' educational background (Table V-11) suggests a young, inexperienced, but highly educated faculty. This conclusion reflects Indiana State Law requiring all teachers to have a Master's degree at the end of the fifth year of experience and, probably a school board policy which encourages the employment of beginning teachers.

Table V-9 Classroom Teacher Age Range

Age Range	Number per range
20-29	13
30-39	14
40-49	2
50-59	12
60 and above	7
Total	48 teachers

Table V-10 Classroom Teacher Years of Teaching Experience

Years of teaching experience	Number of teachers School A	School B	School C	Total
1-5	10	7	3	20
6-10	7	2	1	10
11-15	3	1		4
16-20			1	1
21-25	3	2		5
26-30				0
31-35	3		2	5
36-40	2	1		3
Total	28	13	7	48

Previous supervising experience of classroom teachers ranged from one assignment to twenty assignments, with an average of 3.61 assignments. Typically, classroom teachers had less than one semester hour of course work dealing with supervision of student teachers.

In an effort to further describe the characteristics of the classroom teachers, a Background Data Questionnaire was administered. Information gathered by this instrument suggested that the majority of teachers belonged to the Great American Middle Class. In like fashion, classroom teachers perceived themselves as "open-minded" and "willing to adopt new ideas which seem to make good sense."

Classroom Teacher Objective One: to increase the classroom teacher's awareness of, and responsibility for the preparation of teachers.

An attempt was made to orient the classroom teachers to their roles and responsibilities in the preparation of teachers through a program calling for extensive involvement on the part of all supervising teachers. An increased student teacher to supervising teacher ratio was achieved through a well-orchestrated program in which each supervising teacher had two student teachers during a regular school day. One student teacher was in the classroom in the morning from 8:00 to 11:30 a.m.; another student teacher was in the classroom in the afternoon from 12:00 noon to 3:30 p.m. This back-to-back arrangement allowed the classroom teacher released time for the performance of increased supervisory duties.

To insure classroom teacher involvement in the preparation of teachers, scheduled supervisory conferences were established. Typically, three-way conferences were held consisting of the student, the classroom teacher, and a graduate assistant or methods professor. Although supervisory conferences were to be held as needed, formal conferences were scheduled at four-week periods to insure minimum attention to the area of supervision.

Probably the most formal, albeit belated, attempt to reach the objective of increased involvement and responsibility for student supervision was made through the establishment of teaching clinics. Table V-12 contrasts the one-on-one supervisory conference to that of the teaching clinic.

All teaching clinics operated using the following ground rules:

We only speak with empirical data trying not to make value judgments. It is up to the student teacher to weigh these statements and value them accordingly.

Discussion should focus on teaching behaviors, teaching processes, teaching strategies, teaching approaches and avoid personal observations or personal remarks about the student teacher.

Present all data in an honest manner and all suggestions in as supporting a manner as possible. Attempt to preserve interaction between the peers.

The teaching clinic, when contrasted with individual supervisory conferences, has distinctive advantages. First, the clinic allows focus on several instructional elements simultaneously. Second, the clinic facilitates the systematic collection of data. Third, the teaching clinic facilitates the objectives of peer interaction and self-evaluation.

Data collected from classroom teachers documents the need for extended experience and practice with the teaching clinic. In part, this need is explained by knowledge of the eleventh-hour effort made at establishing the teaching clinic in the Professional-Year Program. Inexperience with the concept, no doubt, explains many of the classroom teachers' reactions and

Table V-11 Classroom Teacher Educational Background

Type of degree	Number of teachers
Two year degree	2
Bachelor's degree	22
Master's degree	22
Master's and additional hours	2
Total	48 teachers

Table V-12 Components of Two Supervision Models

Individual Conference	The Teaching Clinic
Participants Student teacher and supervisory person (one-on-one conference)	**Participants** Student teachers (3 or 4), classroom teachers, and clinic leader (this leader could be a peer, a classroom teacher, or a methods or supervisory person)
Steps of the Model	**Steps of the Model**
1 Planning session	1 Planning
2 Observation	2 Observation
3 Preconference	3 Critique Preparation
4 Conference	4 Critique and strategy development session
5 Post conference	5 Supervisory team review

undergraduates' reactions cited earlier in this chapter. In spite of our inexperienced and limited use of the teaching clinic, it is interesting to note that the majority of the classroom teachers thought that the teaching clinic was as effective as the traditional supervisory conference. Such data should encourage further investigations and use of the teaching clinic concept in field-based teacher education programs.

Table V-13 Classroom Teachers' Reactions to the Teaching Clinic

Statements	Mean response scores
1 With respect to this clinic, I participated _____. *Very little 1 2 3 4 5 A great deal*	2.8
2 I found this teaching clinc to be of _____ interest. *Little 1 2 3 4 5 Great*	3.0
3 I found this teaching clinic to be of _____ value to me. *No 1 2 3 4 5 Great*	2.8
4 I think the teaching clinic improves my supervisory skills. *Disagree 1 2 3 4 5 Agree*	3.4
5 I think the teaching clinic helps to refine the teaching skills of the student teacher. *Disagree 1 2 3 4 5 Agree*	3.7
6 I personally do not believe the teaching clinic is a good way to get feedback on one's teaching. *Disagree 1 2 3 4 5 Agree*	3.3
7 I think the teaching clinic is a good way to become aware of relationships among the various teaching skills. *Disagree 1 2 3 4 5 Agree*	3.5
8 I personally do not believe the teaching clinic is as effective as the traditional mechanisms in providing guidance to the student teachers. *Disagree 1 2 3 4 5 Agree*	2.7

Table V-14 Supervision Scale – Classroom Teachers Mean Scores

Statements	Mean response scores
1 Supervision conferences were of _____. *No real value 1 2 3 4 5 Great Value*	3.6
2 The videotape of my teaching was _____. *Not very beneficial 1 2 3 4 5 Very beneficial*	3.8
3 Generally, I feel that quality of classroom teacher supervision of the associate teacher as the year progressed _____. *Did not improve 1 2 3 4 5 Markedly improved*	3.8

The final evaluation (See Table V-14) indicated that all forms of supervisory conferences were perceived by the classroom teacher as "valuable." Further, classroom teachers felt they had markedly improved their supervisory skills. When asked, "Did you video tape yourself the past year?" about one-half answered "Yes." Of this number, most felt the experience was quite beneficial.

Classroom teachers were asked to rank five dimensions of effectiveness for each student teacher on a five-point scale. The five dimensions included: personal characteristics, professional qualifications, instructional effectiveness, classroom management, and the student teacher's ability to inspire and motivate elementary pupils. Table V-15 gives the classroom teachers average rankings of the student teachers on each dimension. Classroom management received the lowest mean score of the five dimensions, although certainly not considerably different from the scores in the remaining areas. All rankings were high, falling between "good" and "very effective." Richard Switzer[1] compared the ranking of classroom teachers in the Professional-Year Program with the ranking of classroom teachers in the "regular program." Professional-Year student teachers, along all five dimensions, received higher rankings than did regular student teachers.

After the student teachers had completed their year-long internship in the classroom, classroom teachers were asked, "How good do you feel about the supervision which these students received in light of the supervision which 'regular' student teachers generally receive?" Overwhelmingly, classroom teachers felt they had given Professional-Year

Table V-15 Classroom Teachers' Assessment of Student Teachers

Response categories
1 unsatisfactory
2 acceptable
3 good
4 effective
5 outstanding

Dimensions	Mean response scores
Rate the student teacher that you worked with most recently in this program on each of the following five dimensions:	
1 Personal characteristics	3.9
2 Professional qualifications	3.6
3 Instructional effectiveness	3.6
4 Classroom management	3.3
5 Ability to inspire and motivate	3.4

student teachers better supervision than that which they had given to student teachers in the regular program.

Measurable differences such as these, whether real or perceived, come from a closeness with, and a responsibility for, the preparation of prospective teachers. These are encouraging findings. To a large degree they substantiate what the undergraduate proudly referred to as the "motherliness" of their supervising teacher. We believe such closeness does make a difference.

Classroom Teacher Objective Two: to increase the classroom teachers awareness and knowledge of current instructional processes.

The second objective, to increase the classroom teacher's awareness and knowledge of current instructional processes, was planned for through formal and informal means. Because of the intensive involvement of student teachers in the classroom, new instructional approaches were being informally introduced into the classroom on a daily basis. Teacher comments indicated that they perceived this informal introduction of strategies into their classroom as "refreshing" and "the one real reason why I like to have student teachers." How much impact this informal introduction had on classroom teacher behavior remains largely conjecture. From our observations of teachers in the classroom, we can only conclude that there is relatively little permanent transfer. This did not surprise us, nor should it surprise the reader. Human behavior, as Etzioni[2] noted, just is not that subject to change. However, the introduction of a few open classrooms, interest centers, mathematics ability groups, etc. was evidence that enough triumphs occur to sustain the faith of a change agent.

Formally, the Professional-Year Program attempted to increase classroom teacher awareness of current instructional processes through the establishment of weekly in-service seminars. To encourage participation, classroom teachers, if they so desired, received one hour of graduate credit for their involvement each semester.

In-service seminars dealt with a variety of instructional issues depending upon the content area under discussion. Typically, methods professors used the time to communicate what was currently being studied in methods classes. Because teachers indicated a particular interest in "seeing" instructional techniques in operation rather than "just hearing about them," in-service seminars tended to be more successful when interaction was encouraged. Clearly, the most successful in-service seminars were demonstration lessons and discussion sessions focused upon videotaped presentations of lessons previously given in selected classrooms. In addition to these "show and tell" seminars, other sessions dealt with instructional processes, classroom interaction patterns, questioning techniques, non-verbal communication in the classroom, and the like.

In addition to the instructional function, in-service seminars also played an important role in the on-going operation of the program. In an effort to keep the in-service seminar from becoming strictly a program-maintenance operation, special meetings were established to attend to on-going operational concerns.

Evaluation of the in-service program by classroom teachers indicated that generally classroom teachers were pleased "with the variety of seminar sessions presented" and that "on the whole" these sessions were perceived as being "very useful." Such general comments, however, distort the true picture. Individual teacher ratings of most sessions spanned the scale from those perceiving the session as "useless" to those perceiving it as "extremely valuable." Interestingly, our analysis of the data indicated that certain teachers consistently rated the sessions negatively, while others consistently rated the sessions possitively.

Classroom Teacher Objective Three: to increase the classroom teachers awareness of the needs in teacher education.

Probably one of the greatest needs in teacher education is the development of a curriculum which successfully melds classroom theory with classroom practice. In its side by side arrangement of methods instruction and student teaching, the Professional-Year Program did increase the probability of such melding.

Classroom teachers were asked to rate student teachers on their understanding of the issues involved in several instructional topics. Table V-16 indicates that classroom teachers perceived students in the Professional-Year Program to have an adequate, though not outstanding, understanding of the underlying issues involved in typical instructional topics.

One classroom teacher concluded as the result of an independent study project in which classroom teachers were surveyed that " . . . although 40 percent is not a majority, it does represent a number of teachers who feel that undergraduates neglect their methods class work in a field-based program." Such expressions of concern, though far from universal, are indicative of perceptions which classroom teachers can make to assist program development in teacher education.

Probably the most encouraging indicators of growth towards this objective were noted informally on routine visits to the classroom. Classroom teachers were especially willing to assist students in comprehending what they perceived to be crucial understandings about children, how children learn, and what a "good" classroom environment ought to look like. Teachers were typically very willing to participate in methods classes. It is a sad commentary on the methods professors that teachers were not used more fully in a role which so many obviously wanted to play. Clearly, one of the principle reasons why teachers were not encouraged to take a more active part was that such action would illuminate philosophical differences

Table V-16 Classroom Teachers' Assessment of Student Teachers' Behavior

Response categories (Statements 1-3)
No preparation 1 2 3 4 5 Great preparation

	Statements	Mean response scores
1	Understanding the needs of children	3.6
2	Understanding of instructional processes	3.6
3	Use of alternative curricular materials	3.5

Response categories (Statements 4-19)
No preparation 1 2 3 4 5 Complete preparation

4	Skill practice in the classroom	3.7
5	Laboratory approaches to teaching	3.4
6	Use of alternative styles of teaching	3.4
7	Solutions to daily classroom problems	3.1
8	Organizing and sequencing of materials	3.6
9	Tools for pupil evaluation	3.0
10	Examination and clarification of values	3.1
11	Lesson plan construction	3.2
12	Classroom management techniques	2.9
13	Use of pupil reinforcement techniques	3.6
14	Introduce new and innovative ideas	3.7
15	Adapt lesson to level of students	3.4
16	Use of question asking strategies	3.4
17	Motivating pupils	3.5
18	Awareness of different levels of pupil attention span	3.2
19	Wrapping up or closure of lesson	3.1

Response categories (Statement 20)
Disagree 1 2 3 4 5 Agree

20	A major criticism of the methods classes is that they preach on "what to do" but they never show you "how to do."	2.4

as well as differences in emphasis between classroom teachers and methods professors. Rather than such direct confrontations, methods professors typically chose a more subtle, less obtrusive route. Methods professors perceived themselves as "invited guests" in this field-based setting and until a true partnership is established, such a perception, however accurate, is likely to curtail much needed growth and understanding.

Classroom Teacher Summary

In terms of the individual change objectives outlined for classroom teachers there appears to be overwhelming support for the conclusion that growth towards each of the objectives took place. Although this is true, clearly much more growth could have taken place and in all likelihood would have, had there been previous experience in implementing these objectives in field-based situations.

Those seeking to implement a teacher education program in a field-based setting will be wise to insure adequate channels of communication between classroom teachers and all other program participants. Classroom teachers are called upon to play a new role in such an educational arrangement. Roles established must be meaningful. Our experience has shown that classroom teachers can perform in these roles and can become a vital and regenerative element in a viable teacher education program. If there is a genuine desire for active classroom teacher involvement in teacher education, needed mechanisms can be established. To work effectively, these relationships must be built on mutual respect and a desire of all parties to do things in better ways. We believe the university-public school consortium is such a vehicle. A consortium can produce flexibility of view, commonality of viewpoints, and a mutual commitment to action. Given the importance of the teacher education function, such consortia seem necessary for further progress.

Graduate Assistants

Ten graduate assistants participated in the 1971-72 Professional-Year Program. All graduate assistants [illegible] working on advanced degrees in their respective areas. Although graduate students were remunerated for their effort, their involvement was seen as a planned internship in preparation for a career in college teaching.

In terms of preparation, graduate assistants tended to bring with them several years of teaching experience (an average of 5.2 years), as well as several years of supervisory experience (an average of 2.3 years). Graduate assistants represented several areas of the United States including Minnesota, Florida, Maryland, California, New York, Texas, and Indiana. Six of the graduate students were female; four were male. One minority group was represented. Table V-17 shows the distribution of graduate assistants by program area responsibilities in the 1971-72 Professional-Year Program.

Graduate Assistant Objective One: to better prepare prospective teacher educators by increasing their awareness of needs within the public school milieu.

Graduate assistant involvement in the Professional-Year Program took a variety of forms including methods instruction, supervision, demonstration teaching, in-service seminar instruction, research, and general program trouble-shooting. Graduate assistants worked with undergraduates, classroom teachers, methods professors and classroom pupils. Generally, as Table V-18 indicates, graduate assistants praised these experiences. Interestingly, while graduate assistants felt that their experiences were highly valuable, they did not feel they had a great deal of responsibility in the operation of the Professional-Year Program. Although not indicated here, the imbalance that existed between high involvement and low responsibility led to several irritations between assistants and methods professors. Because methods professors tended to be young and inexperienced themselves, they may have been reluctant to turn over responsibilities which they themselves were first assuming.

As a group, graduate assistants repeatedly demonstrated their awareness of needs within the public school milieu. Graduate assistants typically spent as much time assisting classroom teachers to secure needed materials

Table V-17 Number of Graduate Assistants by Program Area Responsibilities

Area of responsibilities	Number
Science/Supervision	3
Social Studies/Supervision	3
Mathematics/Supervision	1
Language Arts/Supervision	2
Supervision	1
Total	10

and "make do" as they did assisting student teachers and methods professors. Classroom teachers were especially supportive of the graduate assistants and on several occasions formally expressed their thanks for the assistance and understanding given. On several occasions graduate students acted as a liaison between classroom teachers and school administrators. Probably no single group of participants worked harder nor were as intent upon solving the myriad problems that plague public schools today.

While the above statements are true, there were exceptions to this rule. Graudate assistants were young and sometimes professionally immature. Clashes did occur between graduate assistants and classroom teachers. These occurrences usually took place early in the year and were resolved, on the whole, easily. A lack of elementary school teaching experience (high school experience counts little in the eyes of elementary teachers) seemed to ignite many clashes.

Graduate Assistant Objective Two: to better prepare the prospective teacher educator by increasing his awareness of the instructional needs in teacher education.

In light of the career orientations of graduate assistants, the Professional-Year Program afforded prospective teacher educators an early opportunity to involve themselves in programs which, it was hoped, they themselves would soon be creating or staffing. In addition to their methods responsibilities, each graduate student supervised at least ten student teachers. Graduate assistants were, as a function of their many responsibilities, in

Table V-18 Self-Evaluation by Graduate Assistants Regarding Program Involvement

Statements	Mean response scores
1 The experience of working in the classroom was of ____. *No value 1 2 3 4 5 Great value*	4.4
2 The experience of working with the elementary pupils was of ____. *No value to me 1 2 3 4 5 Great value*	4.3
3 The experience of working with the classroom teacher was of ____. *No value to me 1 2 3 4 5 Great value*	4.3
4 The experience of supervising the associate teachers was for me of ____. *No value 1 2 3 4 5 Great value*	4.3
5 How much responsibility do you feel you had this year with respect to the Professional-Year Program? *Great responsibility 1 2 3 4 5 Minimal responsibility*	3.0

constant contact with all program participants including classroom teachers, student teachers, and methods professors.

It is no overstatement to say that typically graduate students took their teacher education responsibilities *very* seriously. Graduate assistants employed on a half-time basis reported working thirty to thirty-five hours per week when preparational time was included in their estimates. They prepared and presented formal reports to the project director regarding needs within the program. They reported giving an average five demonstrations each semester. Together with their methods professors, graduate assistants prepared instructional materials, tested instructional strategies, and redesigned program elements. In methods class, graduate assistants reported taking responsibility for up to one half of all sessions.

When graduate assistants were asked, "Was the amount of time spent with the Professional-Year Program worth it in terms of the rewards received?" all ten graduate assistants "agreed" or "strongly agreed" with the statement. Given an opportunity to elaborate upon their response, statements such as the following were made:

> "Because it's so rewarding to see a teacher grow."
>
> "It's exciting, there is so much to do . . . and besides I was getting tired of just course work. This experience allowed me to try out some of my ideas."
>
> "I 'agreed' rather than 'agreed strongly' because while I felt I grew, I felt I was *used*."
>
> "Because I learned a lot this year . . . few answers, mind you, but lots of needs."

Graduate Assistant Objective Three: to better prepare prospective teacher educators by increasing their knowledge of the need for an expanded field and institutional base in the preparation of teachers.

An expanded base of involvement in teacher education has been called for in an effort to more effectively prepare prospective classroom teachers. The Professional-Year Program, with extensive community and school experiences, is a direct attempt to bring three key groups together to face a common concern. Graduate assistants, by their involvement, were given sundry opportunities to evaluate, weigh, and judge the input of various groups to the program.

Although graduate assistants were not asked to judge the relative worth of community involvement in teacher preparation, they were asked to judge the relative value of the university and public school input, but these differences were minor. Both groups were judged to have played "a major role in the preparation of prospective teachers." To what extent these judgments reflect the future involvement of these prospective college teachers in field-based programs is largely unknown. It is our impression, however, that graduate assistants need little convincing regarding the worth of an expanded base of involvement in teacher education. Their energies were directed toward operationalizing what they already accepted as a need.

Graduate Assistant Summary

There appears to be adequate support for the conclusion that growth towards each individual change objective did take place. This is indeed a forceful conclusion. It is our recommendation that an internship, such as provided in this program, become an integral component of the formal education of each prospective teacher educator. Through the internship graduate students became involved and through this involvement, they became teacher educators. That they will perform more effectively than graduate students not having this experience, will surprise no one closely involved with the program.

Those seeking to implement an internship program for prospective college teachers would do well to follow the model provided by the Professional-Year Program. If asked to make recommendations to further strengthen the internship, we would suggest increasing the length of this involvement and structuring it so that interns feel a greater responsibility as members of the team. Many graduate assistants tend to be available for ten months of program duty. This is too brief a time to assume certain planning, management, and evaluation responsibilities. If greater responsibility can be given over a longer period of time, the model just described would be an excellent one for other universities to consider.

University Professors

While the composition of university professors varied from year to year, typically professors were young (mean age 36), came from the lower professorial ranks, (0 professors, 3 associate professors, 2 assistant professors, and 3 visiting professors), and stayed with the program a short period of time (1.6 years). During the operation of the 1971-72 Professional-Year

Program, all methods courses were headed by holding the assistant or visiting professorial rank.

Several factors entered into the selection of faculty for participation in the Professional-Year Program. First, as one of the principal purposes for involvement was to increase competency, senior faculty members perceived this goal as speaking to the abilities of junior faculty members. Second, while some senior faculty were involved in their own innovative programs, others were hesitant to participate in a program which required a large commitment of time and energy, and for which they would not be given credit for having conceptualized the program.

University Professors Objective One: to increase the professors general awareness of the role of the public school milieu in teacher education.

To a large degree, the program itself was designed to facilitate the achievement of this first objective. In addition to teaching methods classes in the public schools three times a week, methods professors conducted in-service seminars once a week for the supervising classroom teachers. Further, each methods professor was given direct responsibility for supervising several student teachers along with overall supervisory responsibility for the entire group of 92 student teachers. The professors estimated that about 70 percent of their professional time was spent in the public schools. One methods professor noted that every time he walked into a school, whether it was to teach a methods class, conduct an in-service seminar, or observe a student teacher, he was "besieged" by questions from classroom teachers, administrators, and student teachers. Not only did methods professors become aware of public school needs in general, but they became painfully aware of needs within particular schools and rooms.

One manifestation of the methods professors' awareness of the broader needs of public schools was the establishment of special seminars for classroom teachers. These seminars grew out of the needs expressed by public school personnel. Although attendance was optional, most teachers who attended these seminars seemed to appreciate these responsive efforts on the part of methods professors. Such reception, coupled with the knowledge that these seminars were arranged by professors, seems indicative of a beginning awareness of the needs of the public schools by methods professors.

University Professors Objective Two: to increase the methods professors general awareness of instructional needs in teacher preparation.

While partial fulfillment of this objective came about because of the intensive involvement of methods professors in the school, other related factors should be considered. Several of these factors, along with relevant data, are recorded in Table V-19.

Although comparative data are not available, figures such as these document a high level of involvement by methods professors and suggest an increased involvement in comparison to methods professors who teach on college campuses.

In addition, methods professors worked closely with one or two graduate assistants in teaching the methods courses. This instructional arrangement afforded many opportunities for discussion of the basic program. Taken together, this interfacing of methods professors with other methods professors, classroom teachers, student teachers, graduate assistants, administrators, and elementary school children, suggests an intense if not constant focus and attention to the instructional needs of the prospective elementary teacher.

University Professors Objective Three: to increase the methods professors general awareness of the need for an expanded field and institutional base in the preparation of teachers.

Cooperation is needed in the preparation of teachers, not only between colleges and public schools, but also between colleges and community

Table V-19 Factors Relating to Instructional Needs in Teacher Preparation University Professors Mean Scores

Statements	Mean response scores
1 How many times this year have you met with other methods professors associated with the program to discuss the integration of methods with the student teaching experience?	20
2 How many times have you met with the classroom teachers to discuss the articulation of methods into the elementary school curriculum?	15
3 How many times this year have you taught lessons in the elementary classroom?	26
4 How many times this year have you videotaped your teaching either for personal critique or for classroom demonstration purposes?	13
5 In how many of the grades K-6 have you taught during the past academic year?	4
6 How many times during the year have you viewed student teachers or classroom teachers teaching a lesson to elementary school children?	61

agencies. As is evident from previous statements, the Professional-Year Program provided ample opportunity for professors to become aware of the need for cooperation between colleges and public schools in the preparation of teachers. During the course of the year, opportunities were provided for interaction with many community agencies: day care centers, nursing homes, nursery schools, drug rehabilitation centers and so on. All program participants, including professors, were encouraged to make arrangements to visit a variety of community agencies. Several community agencies took the initiative by inviting program participants for on-site visits. This interchange was generally reported as "beneficial." One piece of concrete evidence which speaks to the growing awareness by methods professors for increased community involvement is knowledge that community personnel (state police, doctors, lawyers, school dropouts, teachers, and parents) were invited to participate in the special seminar days. Clearly, this is prima-facie evidence that some growth toward the objective occurred as methods professors were responsible for establishing, organizing and conducting these sessions.

Section Summary

In an effort to determine the perceived worth of a program such as the Professional-Year Program, methods professors were asked several evaluative questions. The results of this survey are summarized in Table V-20.

As might be expected, certain aspects of the program were viewed more favorably by methods professors than others. Overall, professors felt the program was worthwhile in terms of their own professional growth and the professional growth of their students. Professors believed, however, the program demanded an inordinate amount of their time. It is our belief that this concern is frequently expressed by methods professors because of their understanding of the reward system of most universities. If field-based programs are to continue, universities must realize the increased demands made by these programs, and reflect this understanding by making the rewards of tenure and promotion available to those who involve themselves heavily in the educative function of the university.

Chapter Summary

This chapter has provided a detailed treatment of the impact of the program on the individuals involved. Because of the chapter's length, it may be useful to summarize the results with each of the major participant groups. For this purpose, we turn to a set of data collected from classroom teachers and university professors in December, 1972. The data reflects how well these groups perceived the Program to be achieving six general objectives. Each objective is listed below followed by comments made by various participant group members. The discussion section following each objective will attempt to clarify the data and observations presented earlier in the chapter.

Table V-20 Program Evaluation—Methods Professors Mean Scores

Statements	Mean response scores
1 How well did the program train student teachers in comparison to other programs? *Much poorer trained 1 2 3 4 5 Much better trained*	5.0
2 How well were methods classes integrated with student teaching? *Weak 1 2 3 4 5 Of highest quality*	2.0
3 How valuable were the community experiences? *Minimum value 1 2 3 4 5 Great value*	3.3
4 How much value was the program to your professional career? *Little value 1 2 3 4 5 Great value*	4.3
5 How much of your time was demanded by this program? *Less than on campus 1 2 3 4 5 An inordinate amount*	5.0
6 The amount of time spent in the program exceeded the rewards derived from the program. *Strongly disagree 1 2 3 4 5 Strongly agree*	2.0
7 If I could live the past year over again, I _____. *(1) Definitely would choose not to participate in the program.* *(2) Probably would choose not to participate in the program.* *(3) Probably would choose to participate in the program.* *(4) Definitely would choose to participate in the program.*	3.0

Objective A: To strengthen the reality orientation of methods instructors (professors and advanced graduate students) by exposing them daily to public school reality and by providing feedback from teachers and undergraduates on the practical value of methods instruction.

Classroom Teacher Responses

No program can insure this. The most important factor is the openness of the methods instructor.

This end was better reached with the professors who developed the original program. The replacement professors don't seem as interested in learning from us.

This year the professors have not distributed any methods course outlines to teachers. What are they doing in methods?

Some instructors change a great deal and others bring their campus course outline with them and stick to it–depends on the instructor.

There should be continuity from year-to-year in methods courses, but new professors throw out all that went before and relearn real world lessons slowly and painfully.

Methods professors are barraged by feedback from student teachers . . . but to what degree does all this feedback result in changes in methods courses?

Teachers should be scheduled to make presentations in methods classes on a regular basis.

During the first two years this objective was well met. It is less well met today. This new group of university professors needs more time to get to know us, our school, and our pupils.

Everyone has been willing to communicate; the problem is finding time during a busy day to do it.

There was considerable evidence that methods professors used our suggestions during the first two years, but this year I don't see it.

University strangers to this program initially are not as strong as the veteran professors on campus who have been here for years and have worked with our schools in various capacities.

At the moment, the program utilizes first year professors and associate instructors; they just do not have the experience that many of the senior professors on campus have.

This is a hard question to answer–I have had some very reality oriented professors both in this program and on campus.

University Professor Responses

We hear so much feedback that it becomes difficult to preserve sufficient class time to complete all the important methods units.

The methods team asks teachers for topics to be included in methods, techniques that should be stressed, and the like, but most teachers do not take the time to reply.

We should not teach only current school practice. We must go beyond local practice to emerging curricula, strategies, concepts, and trends.

A program like this must guard against a fixation upon the status quo of the local school system.

The local classroom can not be our sole focus. There are innovative ideas and emerging techniques to be taught that are not represented locally. We have a reality orientation to elementary education in general—and especially to its cutting edge.

A kindergarten teacher suggests that we teach kindergarten methods, a sixth grade teacher argues for sixth grade methods—I have to make methods generalizable to the total elementary school experience. Teachers are critical of us for not giving methods a specificity that it can not and should not have.

While these responses speak for themselves, it should be noted that 84 percent of the teachers perceived the methods instructors in the program as possessing as much or more reality orientation as their counterparts on campus. Since many university professors were in their first year of college training, the data speak well for the ability of these young instructors to rapidly attune themselves to the ways of public schools. It is likely that the young instructors will be more sensitive than the "old instructors" in the years ahead because of their first field-based assignment.

Implementors of similar programs should not expect all in-service or pre-service teachers to perceive any methods courses as 100 percent integrated, relevant, or practical. Many teachers would like student teachers to be prepared to cope with the problems currently represented in their particular classrooms. Instruction would be provincial if it focused only upon kindergarten needs, or fifth grade, needs, or the instructional program of School District Z. Teachers and student teachers are less likely to recognize the value of methods concepts and methods generalizations since they are caught up in "keeping school" daily. University professors know that no school system utilizes all the best instructional materials or methods known to man. Rather than focusing on "school keeping" today, the methods professors must worry about a conceptual basis for teaching, tomorrow's demands on teachers, teaching in another state, and the facilitation of innovation in teaching. There should be great concern if methods instruction is evaluated as 100 percent relevant to the on-going practice in a given school. All methods instructors should stimulate pre-service students to look beyond the status quo—even if by so doing university professors are criticized on practicality and relevance by today's practitioners. Often the methods instructors will be charged with presenting too much theoretical materials. Some teachers label anything they do not use or do as "theoretical" when in fact the material is very practical and relevant in other school systems. If the methods instruction is markedly integrated with student teaching to the point where pre-service teachers try out new materials or techniques in the classroom, there is likelihood that the supervising teacher will be enticed to adopt innovative procedures of the student teacher. Upon the heels of adoption comes the judgment of relevance.

Objective B: To strengthen the supervisory capabilities of classroom teachers through a formal program of supervisory skill training and by giving them greater responsibility for the supervision of student teachers.

Classroom Teacher Responses

> I sometimes feel that the classroom teachers are having to teach methods, do the supervising, write up observations for methods people, evaluate student teachers, and evaluate the program itself while university folk are paid for all this.

> Teaching clinics where 3 to 4 student teachers, the supervising teacher, other classroom teachers, and methods instructors have participated have helped me to gain many new supervisory skills.

> The rich variety of observation sheets employed in this program has helped me to focus more intensely on teaching behaviors I hope to have my student teachers master.

Participating teachers tend to feel that Objective B is rather well met—their own supervisory capabilities have been strengthened. An assortment of supervisory training activities and devices were available to any teacher who was willing to take the time to use them. However, time is a problem. Most teachers feel that the minutes spent in critiquing a student teacher or learning how to more effectively supervise a student teacher are minutes stolen from pupils or from the teacher's breάk period. There is little doubt that these teachers, working with student teachers who were applying methods to teaching over a full year, counseled more with the student teachers than did their colleagues in nearby schools. For example, teaching clinics simply were not run, and weekly observation forms simply were not used in the non-program schools. Yet program teachers who invested the extra time and effort on Professional-Year student teachers received no more financial consideration in 1972-73 than supervisors of "regular" student teachers.

What is the payoff for classroom teachers who conscientiously work at learning how to be a better supervising teacher? What rewards do they receive for shaping the professional performance of 16 to 24 student teachers over a four year period? Implementors of similar field-based programs are *not* likely to find the following answers palatable to teachers: (1) a guarantee of a conventional student teaching stipend every semester, (2) a guarantee of a student teacher every semester (most teachers feel that they can obtain "regular" student teachers routinely without volunteering to join more demanding special programs), (3) increased contact wtih university personnel (although this may be attractive for a year or two), (4) the satisfaction of having helped to better prepare future teachers for some other school system, and (5) the knowledge that a special contribution has been made to the education profession.

If teachers are to invest significant time in the preparation of pre-service teachers, combinations of the following conditions must prevail: (1) universities must repay teachers by providing demonstrations, new materials, innovative curricula, and convenient in-service education courses, (2) supervising teacher monetary reimbursement must be increased—possibly through eliminating most on-campus student teaching personnel and redistributing their salaries to well qualified supervising teachers, (3) research must be conducted that indicates that children (pupils) learn more and receive more individual attention because student teachers are present in classrooms, (4) team teaching models must be devised and utilized so that student teachers supplement rather than replace the supervising teacher, (5) participating school systems must consider the student teaching program as primary staff recruitment opportunities, (this means that collaborating systems must be of sufficient size to need many replacement teachers annually), (6) school systems must be interested in the concept of differentiated staffing and willing to include student teachers in such an organizational structure, and (7) universities must give more credit to classroom teachers who assume greater responsibility for supervising pre-service teachers. In the final analysis, the university still expects and receives the compliments for a preparation job well done while teachers do not.

Objective C: To strengthen the practical value of methods instruction by integrating methods classes with student teaching and offering the classes in actual school settings.

Classroom Teacher Responses

Sitting in a church doesn't make you a Christian.

The methods instructors have operated for four years in our schools; they have made many revisions in their methods plans due to teaching problems the student teachers encounter in the classroom. It isn't easy to be a methods professor either and I have noted many changes in their instructional approaches.

Objective C received rather favorable responses from teacher participants. One teacher quotation bluntly makes the point that a change in instructional environment does not necessarily guarantee improved quality or increased relevance in instruction. However, the physical nearness of pupils, principals, teachers, and school materials is a factor that student teachers will not permit university instructors to ignore. Most respondents feel that methods instruction was altered to support and enrich student teaching, that it was tailored to relate to the instructional programs in the host schools. The *location* of methods instruction is important, not because it insures instructional innovation, but because it opens the instructors up to ceaseless suggestions and evaluations from individuals (teachers, student teachers, school pupils) who did not communicate with methods instructors previously.

School of Education isolation is dispelled when university classes annually are conducted in public school classrooms. Exchanges of opinions and techniques are greatly increased just because teachers and professors see each other daily in rooms, corridors, lounges, and offices. Field-based programs of this nature automatically imply new communication networks. They also require organizational structures where superordinate-subordinate relationships are eschewed in favor of peer teams and task forces operating in an atmosphere of informality.

Objective D: To provide opportunities for public school personnel to examine, test, observe, utilize, and study new instructional materials and techniques introduced by Professional-Year professors and interns. To encourage the use, and to promote the adoption of innovative materials and methods by participating teachers.

Classroom Teacher Responses

It has been valuable to have the seminars to use for planning time with professors and for the inspection of methods resource materials.

The in-service seminars were particularly effective during the first three years of the program, but the new instructors are repeating old stuff this year.

The university group seems to have run out of gas when it comes to in-service offerings this year.

The staff doesn't seem to have time to plan in-service presentations any more. Are university administrators serious about the inclusion of this component in the program?

Objective D was reasonably well met according to teachers. Curricular and instructional change did take place in classrooms as a result of the Professional-Year Program. Individual change was predominant. Teachers personally became interested in process-oriented science, learning centers, open classrooms, and attempted their own innovations, calling upon university personnel for counsel and help. There were no cases of institutional change whereby an entire school faculty implemented an innovation across the board.

Many of the seeds for classroom innovation were sown in the in-service sessions. A few teachers would enthusiastically endorse an innovative idea and begin to implement it while a majority of teachers would reject it. The topics of an in-service session had much to do with the teacher evaluations of the in-service component. It was never possible to please everyone, to find time to meet with all the various sub-groups with particular interests. Neither did school administrators choose to rally their faculties around one or two themes for total building improvement so that university in-service efforts could be effectively focused and concentrated.

Faced with a myriad of conflicting expectations from individual teachers rather than from united faculties, methods instructors tended to expose the teachers to the programs and techniques the instructors knew best. This action led to occasional charges of imposing university preferences upon the schools. Nevertheless, many teachers did find that many of the innovations touted by the professors were well worth introducing into their classrooms.

Staff turnover complicated the in-service picture. In the early days of the program veteran professors were armed with new teaching materials that never before had been in the schools. The veteran professors built their in-service offerings around these materials—around inquiry, valuing, questioning, observation, experimentation, and so on. Replacement professors found no money available to add to the store of instructional materials available for in-service. They tended to re-use old materials and to talk about the purposes and superiority of these relatively recent curricula and techniques. Teachers resisted revisitations of earlier in-service topics. After all, they had heard about all these good things once. No district funds were ever available to buy these innovative materials for use in their own classroom. There seemed to be no practical value in talking longer about what might be when it wasn't going to be. In-service offering tended to decrease in popularity after the first two years of program operation. This decline seems inevitable if there is no way for teachers to test the procedures and materials championed by in-service instructors. Inability of harried university personnel to tailor in-service sessions to the expressed desires of very small sub-sets of school faculty will precipitate the decline.

Objective E: To broaden and intensify the educational preparation of pre-service teachers by providing them with a closely supervised, integrated set of methods and student teaching experiences in different schools, under different teachers, on different grade levels.

Classroom Teacher Responses

> The quantity and quality of constructive criticism a student teacher receives is dependent on the attitude and competence of the supervising teacher. This program increases the odds that a student will encounter at least one teacher who believes in plenty of daily feedback.
>
> This is a great program for student teachers but it sure can be rough on us teachers and our pupils.
>
> Different student teachers reporting to my room with a variety of skills, backgrounds, innovative interests, and personalities keep me on my professional toes.
>
> Sometimes I think it is too unsettling for children to have to work with four to six different student teachers in one year.
>
> Discipline in my room used to be much better before all the student teachers started coming.
>
> I like some time to work with my pupils alone, with no student teachers, tutors, observers, interns, and so on to worry about.

Teachers almost unanimously agree that Objective E is well met. Additional evaluative data, not included in this section, indicate that undergraduate participants and university faculty participants enthusiastically share the teacher's judgment. Public school administrators have also evidenced approval of Objective E. Through employment action taken, the employers demonstrate their recognition that Objective E has been relatively well attained each year. Students trained in the program are employed at above normal rates according to follow-up surveys conducted with each group.

Paradoxically there are few of these employers (principals and central office administrators) who personally want to lead their schools into similar teaching programs. The concept of shifting student teachers from school to school and grade to grade is a very commendable and timely one—as long as the shifting takes place in someone else's school or district.

Various groups of program participants seek individual, often exclusive, outcomes from the program. Responding teachers, in this case, perceive important program benefits accruing to the pre-service teachers. Their quotations imply that these benefits occurred with considerable disturbance to the teacher's comfortable routine. But new results require new routines! Some teachers frankly feel that children learn more, cover more pages, and behave better if they are never under the direction of student teachers.

If schools are to host clusters of student teachers and rotate them through a variety of pre-service experiences, attractive outcomes for schools must be targeted. A total school campaign to raise reading achievement levels might be launched. Student teachers could be assigned specific diagnostic, instructional, remedial, enrichment, and evaluative duties in the campaign. The extra educational manpower represented in student teachers should result in tangible, measureable school improvement. This will not happen unless faculty and administrative leadership emerges and school interests are identified and their pursuit bargained into the program. Parity implies that all partners assume their share of the initiative; in this matter, public school initiative has been lacking. It seems ironic that many teachers can wish for paraprofessional help while maintaining that a well trained student teacher is an unwanted, unneeded burden.

It is very encouraging that most practitioners perceive the increased growth in pre-service teachers as a result of field-based programs. It is equally discouraging that they perceive little growth within the other collaborating groups and children. Surely ways can be found to employ two to four intelligent, dedicated young men and women in school classrooms so that the educational opportunity of children is increased and the professional goals of the teacher are more nearly reached. For much too long, teaching has been a September to June solo.

Objective F: To strengthen the supervisory capabilities of university supervision personnel and selected teacher specialists by concentrating their assignments in a limited number of nearby schools, by involving them in supervision training experiences, and by acquainting them more intensely with the teaching practices employed by methods professors and classroom teachers.

Classroom Teacher Responses

Supervision specialists must also observe on-going instruction in school classrooms and try their hand at demonstration teaching occasionally.

Successful supervision specialists are those who have had *recent* classroom teaching experience and some preparatory training in supervision procedures. Don't send us secondary education doctoral students and ex-administrators who haven't taught kids in years.

Many times supervision specialists overdo their nondirectiveness. Student teachers need to discuss their weaknesses but weaknesses are buried under an endless, undeserved blanket of positive reinforcement.

Teacher respondents essentially judged that Objective F was well achieved. The supervision specialists in the program did spend more time in the building, gave more assistance to the teachers and student teachers, and held expectations for student teaching performance that were rooted in methods course offerings. Some important characteristics of effective, respected university supervisors of student teachers may be inferred from the data. Such supervisors are: available in the building frequently and as needed, experienced teachers, elementary majors if in an elementary school, specially trained for their position, assigned to one or very few schools at a time, very familiar with the academic work (methods) that preceded student teaching, in continuous contact with the methods professors who prepared the student teachers, able to conduct supervisory inservice sessions for teachers, capable of critiquing students as well as praising them, willing to demonstrate teaching techniques in the classroom, involved in one preparation program at a time so that all its intricacies can be understood and working relationships developed with all participants.

Preparing effective elementary school teachers is one of the most important concerns of society to which college and school personnel can direct themselves. It is evident from the material presented in this chapter that well thought through programs (1) do produce a measurably different prospective teacher; (2) do provide an effective in-service vehicle for classroom teachers; (3) do provide an effective training ground for prospective college professors; and (4) do provide an effective in-service vehicle for college professors.

Knowing what we now do, we could easily identify new refinements in approaches to evaluation, new questions to ask and answer, and new avenues of research to carry out. To date, for example, little research has explored the issue of program impact upon normative pupil learning. A case study designed to test the viability of this approach for research in teacher education showed mixed results (Harste)[3]. Until more elaborate and more controlled research designs are produced in this area, this final crucible for judging the impact of a teacher education program must wait in abeyance. But take heart! The inevitable conclusion that must be drawn from this chapter is that the Professional-Year Program had a measurable and marked impact on the four sets of individuals involved. To hypothesize that field-based programs have an impact on children as well, seems both logical and heartening to those of us interested in the exploration of alternative and more effective programs of teacher education.

V References

1 Switzer, Richard L., A Comparison of the Student-Teacher Perceptions of Supervising-Teacher Behaviors Under Two Student-Teaching Programs. Unpublished doctoral dissertation, Indiana University, 1971.

2 Etzioni, Amitai "Human Beings Are Not Very Easy to Change After All," *Saturday Review* 72:45-47, 1972.

3 Harste, Jerome C. "The Effect of a Field-Based Program Upon Pupil Learning," A paper presented at the 1973 Annual Meeting of the American Educational Research Association, New Orleans, Louisiana, February, 1973.

VI Institutional Impact

Perhaps the most basic questions that this chapter deals with are these: What were the results of all this effort and expense? Was it really worth the cost? Did it lead to any permanent institutional change? In order to examine these questions and others like them, we have divided the chapter into two major parts. The first part discusses those aspects of institutional change that we were consciously trying to bring about. The second part deals with the unanticipated results, the serendipitous changes that came about without our planning for them. These are the multiplier effects that are called for in Office of Education guidelines.

Anticipated Results

The anticipated results followed logically from each year's statement of objectives. During the initial year of the project the emphasis on institutional change was not completely clear. At best, it was diffused and lacking in focus. By the third year of the project—actually the ideas were developed in the second year—specific operational objectives had been established to accomplish institutional change. It is probably impossible to say with any certainty just how or why this development took place. Certainly it was at least partially a response to the evolution of Office of Education policy in this area. The national TTT Program's emphasis on institutional change, also vague in its initial stages, became clearer in later years.

Local developments produced similar pressures as well. As project personnel realized that their funds were not likely to continue unabated forever, they gave more serious thought to ways of continuing their efforts through what is frequently termed the process of institutionalization. Such thought inevitably deals with issues of institutional change—how to bring it about and how to maintain it. The section on objectives in the 1971-72 proposal began as follows:

> There are both institutional and individual objectives for Indiana's TTT project. The institutional goals represent expectations for change in

program, patterns of involvement, and institutional mechanisms for training teachers. Each is spelled out in more detail below:

Explicit use of an institutional change model and a strategy appropriate for inducing institutionalization of tested TTT programs and practices.

Revision of present program (including changes and additions to present courses, laboratory experiences and field experiences) to provide all prospective teachers with experiences that are more relevant to an urban society.

Development and implementation of specialized courses, programs, and experiences for preparing teachers for rural and urban settings.

Identification of viable roles for each of the institutional participants – Arts and Sciences, School of Education, community, and schools and the careful articulation and integration of these roles throughout the program.

Identification of appropriate institutional mechanisms – new department structures, professional centers, joint school – university – community facilities for implementation of new programs and practices.[1]

Finally, there were some components in the Indiana project which required, or at least suggested an institutional-change focus as the activities unfolded. The specific objectives for the Professional-Year Program, as stated in the 1971-72 proposal, make this clear:

To strengthen the reality orientation of methods instructors by exposing them daily to school reality and providing feedback from teachers and undergraduates on the practical value of methods instruction.

To strengthen the supervisory capabilities of teachers (vis a vis undergraduates), through a formal program of supervisory skill training and by giving them greater responsibility for supervision.

To strengthen the reality orientation of potential methods instructors through a program similar to item #1 above.

To strengthen the practical value of methods instruction by integrating it with student teaching in actual school settings.[2]

Of the above objectives, the first and third concern individuals; the second has both individual and institutional components and the last is exclusively as institutional objective. Therefore, even if an institutional change strategy had not been mentioned explicity in the proposal, it would have been employed in some manner in order to achieve specific, institutional-change goals.

Impact on Institutions

It has been established that Indiana did indeed have institutional-change objectives, but just having them is not enough. The real test comes in examining the actual impact of the program on the institutions involved. During the 1970-71 year, we prepared a comprehensive set of data for the Evaluation Research Center (ERC) at the University of Virginia which had been awarded a contract by the Office of Education to conduct an evaluation of the national TTT Program. As part of the data, we listed 46 institutional change variables and provided documentation on the extent to which each change was actually occurring. In its analysis of our data, the ERC reached the following conclusion:

> The Indiana project specifically documented sixteen (16) of these changes as well as documenting an additional twenty-five (25) institutional variables which cover essentially the same areas as those covered by the thirty (30) original variables which were omitted.

The ERC quotation says in effect that we provided documentation fo forty-one (41) of forty-six (46) institutional change variables although the documentation did not use exactly the same wording as the original statement of objectives with twenty-five (25) of the change variables.

Perhaps it would be useful to begin by simply listing the results under each of the major programs in TTT. Only those results judged to have been documented by the ERC are listed. Programs, rather than institutions are used as the organizing vehicle because many changes are interinstitutional rather than intrainstitutional. At a later point in the discussion, we will summarize the impact upon each of the institutions involved. Before we present the specific results, one caveat is in order. None of the changes has been made across the board in any of the institutions involved, but most have affected significant segments of appropriate institutional operations.

Professional Year Program

"Roadrunner" type supervisors of student teachers have been replaced with specially prepared classroom teachers, supervision specialists, and methods instructors in the Professional-Year Program.

Preservice teacher participants serve in two or three different schools and apply methods concepts in classrooms with pupils of different ages, abilities, and socioeconomic backgrounds over a full year as opposed to one semester.

The School of Education uses staff time and materials to render curriculum consultant assistance to collaborating schools on an informal, non-contractual, on-site basis. This is done "for free" by methods professors and interns working in the schools.

An integrated year-long program of methods instruction, observation and participation experiences in schools and community agencies, and student teaching is offered to elementary education majors by a responsible *team* of university, school, and community personnel.

The assignment of student teachers is made and periodically remade by methods instructors and teachers on the basis of student and teacher needs, rather than by administrators in the student teaching office.

Fifteen semester-hours of methods have moved off campus and are offered in elementary school classrooms over a full academic year.

Public school teachers and administrators now participate in planning and evaluating and play a major role in shaping and reshaping the Professional-Year Program.

Elementary schools as a unit annually accept two student teachers per day per faculty member in a site concentration approach to supervision as distinguished from the one-on-one pattern usually employed. (Individual faculty members may elect not to participate but high percentages do participate.)

A series of in-service seminars have been provided for teachers. They focus on curricular topics, supervision issues, and independent research may be taken for university credit, if desired.

School personnel make presentations in methods classes and provide evaluative feedback on the relevancy of methods instruction.

Methods instructors, interns, and preservice teachers are in daily contact with public school teachers and pupils.

Student teachers are introduced to student teaching through a longer period of exposure to schools and teachers. As a result, they feel more confident in the student teaching role.

Several graduate interns have acquired practical field skills in demonstration teaching, supervision, and consultation by participating in the same field settings as methods professors.

Methods professors establish a follow-up supervisory relationship with their methods students.

A closer working relationship has evolved between university and school personnel.

The schools are exposed to a wide variety of units and materials through demonstrations, student teaching, and in-service seminars.

Community Involvement

Persons from the community, particularly the low income community, have become involved in existing courses required of elementary or secondary majors. They have given presentations, served on panels, and have answered questions within the class sessions.

Teachers in training can now obtain a greater variety of in-school and out-of-school field experiences in Monroe County and other counties of the State. It now is possible for the preservice teachers to earn undergraduate or graduate credit for these experiences.

Both in-school and out-of-school field experiences are available to larger numbers of undergraduate students at an earlier point in their university programs.

Field experiences are available to undergraduate students in Arts and Sciences, Education, and other schools of the University.

These experiences have been legitimized and formalized through the establishment of a center called the Center for Experiental Education within the School of Education. The School is devoting considerable resources – a faculty member, six graduate assistants, and several work study persons – to staff this program.

At least fifty-nine (59) mostly low income persons have been employed by the University to participate in teacher education. Some – but no where near this number – are still employed.

Stronger cooperative relationships have been established between the University and community agencies in two communities (Monroe County and Indianapolis). Examples of these agencies include the Community Action Program, Flanner House, Martin Center, Police Department, the Courts, and the Human Relations Commission.

Community field experience modules have been added to other modules which preservice teachers may elect as part of their required course work. These modules are designed to permit a student to observe and participate in community agencies or to interact with low-income persons.

The community involvement program has exposed rural poor community residents, school and university faculty, TTT staff, undergraduates, graduate students, and foreign students to inner city culture through a program called the Urban Collage Weekends and other forms of visitation and participation.

Some of the goals and the plans of the community were supported directly by the establishment of the South Side Community Center in Monroe County. With approval from the Office of Education, the TTT Program paid the rent on the building and some wages to community persons during its first year of operation.

The TTT Program and the Center Satellite Program in Counselor Education (also funded by USOE) provided joint support to a group of West Side residents in Bloomington to conduct a study of school dropouts. Several agencies including the public schools and Community Action Program were involved in this study, but the data was gathered and reported by the residents themselves.

Urban Education

The School of Education has broadened its programs in urban education through the continued operation of the Urban Semester Program, originally begun by the TTT Program.

A companion program, the Urban Collage Weekends, continues to operate within the School of Education. It continues to expose faculty, students, and community members to the culture of the city through brief living and participation experiences there.

The School of Education has established a new pattern of working relationships with elementary and secondary public schools in Indianapolis.

The School of Education has developed working relationships with several community agencies in Indianapolis.

Academic credit for participation in the Urban Semester Program has been authorized by some departments in the College of Arts and Sciences.

Students from the College of Arts and Sciences have participated in the Urban Semester Program with students in the School of Education.

Professional-Year students have participated in a week long program of visitation and participation in urban schools and Indianapolis community agencies.

Secondary Mathematics Program

The School of Education has incorporated this program into its "regular" structure and it continues to be offered without outside funding.

The Mathematics Department in the College of Arts and Sciences now offers two new courses with updated content in geometry. These are available not only to students in teacher education but to other students as well.

Professors from the Mathematics Department and from Mathematics Education, public school teachers, and undergraduate and graduate students participated in the design of these geometry courses and in the implementation of a teacher education program which incorporated them. This is a departure from the usual method of course revision.

Student teachers begin to work with teachers in their classrooms well in advance of the actual student teaching period.

Student teachers have been paired with cooperating high school teachers by mutual choice.

High school students have been exposed to unique content in geometry through the efforts of teachers and student teachers in the program.

Multiple Arts

A Multiple Arts Program has been introduced in six elementary schools in Monroe County.

A set of materials describing the theory and practice of the Multiple Arts curriculum has been produced. This was done through a Master's Thesis.

This program has been a joint venture of the public schools, The School of Music, School of Health-Physical Education and Recreation and the School of Education. Coordination was carried out by the School of Music.

In-service teachers, usually trained in a single area of the arts, have received graduate training in the philosophy and practice of the Multiple Arts Program.

A summer workshop in the Multiple Arts curriculum has been offered for credit to TTT and non-TTT graduate students in the arts. This workshop was offered jointly by the faculty from music, art education, and health, physical education, and recreation (modern dance).

Unanticipated Results

Although certainly not as numerous, the unanticipated results of the TTT Program were often quite exciting in their own right and in some instances, may continue beyond some of the results that were planned. Call it serendipity or whatever you wish, there is a recognizable set of things happening at Indiana that *probably* would not be happening if the TTT Program had not taken place. Qualifying the last statement with the word "probably" is our attempt to be as honest as possible about who produced what. While it is particularly difficult to identify a simple one-to-one correspondence between TTT and these spinoffs, there is evidence that they did occur largely, if not entirely, as a result of TTT. Where this relationship is more tenuous, we have used appropriate qualifiers.

The Center for Experiential Education, already discussed under community involvement, is a direct spinoff from the TTT Program. Now a legitimate part of the "regular" structure of the School of Education, the Center continues to have both institutional and individual impact. For example, it provided community and school observation and participation experiences for more than 1300 students and faculty last year. Most recently, it has initiated a Prison -- Orientation Series.

As a result of the Chicago conference on Cultural Pluralism, Professor James Mahan, one of the key persons in the TTT Program, has established student teaching assignments in three new cultural settings: with Native Americans in Arizona, with Latinos in Arizona and East Chicago, and with rural whites in Southern Indiana. Since his post-TTT role in the School of Education is to provide field settings for alternative preparation programs, chances are very high that these programs will continue. TTT staff members have been very influential in the greatly increased placement of student teachers in special out-of-state settings.

Since the days of TTT, there has been a proliferation of field-based programs within the School of Education at Indiana. While several factors were probably at work to produce this result – including national trends in this direction – the TTT Program, by making contact with many professors in the School of Education, most certainly deserves a fair share of credit for this development. As an illustration of this, Professor John LeBlanc, a faculty participant in TTT for a year, evolved his own field-based program and obtained funding for it from the National Science Foundation. This program is still going on. We do not assume that Professor LeBlanc would not have developed this program had he not been involved in TTT, but we do assume that his TTT experience was of value in the development of that program. Similar connections can be established between TTT and several other field-based programs. For example, Mr. James Clark, a former TTT staff member, now directs the Rural Education Cluster.

A three semester hour *Community Forces and Schools* course has been created by TTT personnel, evaluated in its experimental stage, and made a bona fide elective course by the Course and Program Change Committee. Volunteer work in community agencies, readings on needs and aspirations of ethnic minority groups, and discussion sessions led by community representatives are included in the course activities. Participants in eight or more of the School of Education's field-based programs now enroll in *Community Forces and the Schools.* During the summer of 1973 five Navajo and Hopi consultants made major instructional contributions to the course.

College of Arts and Science administrators have just appointed a key member of TTT's Professional-Year Program to membership on a new committee to consider a Native American Studies Program.

A practicum for students in a doctoral level reading course was provided through TTT. It was offered at the South Side Center, a community facility established with TTT funds.

TTT personnel were in the forefront in establishing an urban education department within the School of Education. The department continues as a program in a new Division of Teacher Education. (There are no departments in the new division.)

During the 1970-71 academic year, a committee composed of directors of EPDA projects* met to discuss the possibility of pooling resources and submitting a single, institutional grant to the Office of Education. After several months of discussion, an institutional grant proposal was developed and funded. TTT personnel participated in the development and implementation of this institutional grant program.

*There were seven EPDA supported projects with the School of Education at Indiana University.

During the 1970-71 academic year, a new Division of Teacher Education was being contemplated. It became an eventuality in 1972. When one considers the fact that TTT programs generated considerable interest and awareness in undergraduate education, its contribution to this development takes on considerable significance.

Agency Impact

What do these results, both planned and unanticipated, mean when viewed from the standpoint of the institutions involved? It must be admitted that most of the changes have taken place within the University and especially within the School of Education. In saying this, we are both rejoicing in our successes and admitting our failures. On reflection, it scarcely seems strange that a program designed primarily to bring about change in teacher education has had its greatest impact on the School of Education. Although the faculty in Arts and Sciences are also involved in teacher education, the School of Education faculty is more likely to view the training of teachers as one of its primary functions. On the negative side, we had hoped to bring about changes in the larger university as well, and these did not come about in any significant way. Between these two extremes of our effectiveness are the schools and the community. Perhaps now is the time to detail the tangible accomplishments in each of these agencies.

The *School of Education* has undergone a number of institutional changes which can be traced directly to the TTT Program. This does not mean that a simple cause and effect relationship is operative. Other events and activities may have transpired at the same time to bring about the observed changes. Nevertheless, the major contributions of the TTT Program to these changes can be established in clear and precise terms.

First let's review the record on programs – that is, major strands of activity within the TTT project. Several of these – some begun four years ago – continue to operate today in clearly recognizable form. These include:

The Professional-Year Program
The Multiple Arts Program
The Office of Community Experiences
The Urban Semester Program
The Secondary Mathematics Program

When one considers that these five programs constituted a significant portion of Indiana's programmatic thrust (say 95%) during its operational life, we believe it is quite significant that they continue to survive in institutionalized form.

Institutional change in the School of Education has taken place outside the programs as well. More instructors provide experiences outside the framework of their university classrooms. These include early experiences in laboratory and school environments, field experiences in community agencies and settings, taking students to conferences and workshops, and similar devices. Moreover, a formal course has been created to examine the role of community agencies in the education process.

Several programs have emerged within the School of Education with TTT characteristics. Many are field-based in Indiana settings. Four or five are field-based in settings outside of Indiana, some as far away as Arizona and New Mexico. Several of these programs have focused on the needs of least-well-served populations—that is, urban blacks and whites, rural whites American Indians, Latinos, and others. Most have recruited faculty, graduate students, and other representatives from these subcultures to participate in the training of future teachers for these groups.

TTT personnel have been actively involved in the development of a new thrust in undergraduate education with the School of Education and in the creation of appropriate administrative mechanisms to continue that thrust. Specifically, these efforts include the development of the Department of Urban Education, the Division of Teacher Education, the Institutional Grant, and the Center for Experiential Education.

Finally, TTT has left a legacy of concepts and ideas which may well have the most far-reaching, albeit more subtle impact, on the School of Education. Field-based programs have become commonplace. There has been an increased involvement of teachers, students, and community representatives in teacher education. An advisory group with parity representation has been established within the Division of Teacher Education, and least-well-served populations are better served than at any time in the past.

To attribute all of these accomplishments solely to TTT during an era of substantial change within the School of Education would do a great injustice to all those who participated in them. By the same token, TTT does have hard evidence that its contributions have been substantial and lasting.

Impact on the public schools as institutions is equally demonstrable but not as widespread. By this, we mean that only a handful of schools have been involved in the TTT Program in any significant way and only those involved can be said to represent institutional change of any magnitude. Another way of saying the same thing is to observe that institutional change has not permeated the schools in the same way that it has the School of Education. But there have been changes.

The teachers and principals in several elementary schools have participated in teacher education in a much more meaningful way than most teachers and principals do. They have been involved in establishing plans and policies for the Professional-Year Program, in participating in methods instruction and providing feedback to methods instructors, in supervising undergraduates in a carefully planned program of activities, and in performing a variety of other teacher education tasks. Similar roles and activities have been carried out by mathematics teachers in the Secondary Mathematics Program and special teachers in art and music in the Multiple Arts Program.

School settings have been used for teacher training more extensively and more completely than they have in the past. Public school classrooms have been set aside for methods instruction permitting innovations in teacher education that are difficult if not impossible in most programs. For example, methods instructors can and do bring small groups of elementary children into their methods classes. The children are exposed to new materials and techniques without being bused across the city; teachers are provided with new ideas; methods instructors learn what works and what doesn't and students are exposed to the reactions of children to specific methods in the natural school setting. Thus, all of the individuals involved profit from these new institutional arrangements.

There are some disadvantages to these arrangements. No single school can provide as high a proportion of excellent models as would be true if students were dispersed to many schools. Methods instructors and students do have the inconvenience of getting back and forth between the university and the schools, and large numbers of university students and instructors do put additional pressures on the space, equipment, and personnel resources of the school. On balance though, the positive factors seem to outweigh the negative ones.

One other factor with both positive and negative implications needs to be discussed because it has not had the impact we expected. We speak of the impact of university personnel on the school program. There are several possible explanations for this. It was probably true that the physical proximity of the two groups was only a superficial one and that teacher education classes continued in relative isolation from elementary classes. Even the reality of physical proximity is somewhat illusory. Just as one teacher may not know what another teacher does across the hall because there is little opportunity to leave her classroom, it may be equally difficult for her to visit the methods classroom. Even if such a visit takes place she may not view what takes place there as relevant to her own teaching. After all, she is an experienced teacher and may be familiar with much of what is being taught. Then too, if she is not, she may find it difficult to acknowledge her deficiencies in or out of the presence of neophytes.

The methods professor has similar problems from his vantage point. He may not feel secure enough in his own practical knowledge of methods and techniques to display them in front of teachers and in conjunction with real children. Then, too, probably neither the teachers nor the teacher educators thought they were bargaining to bring about changes in the schools when the program was introduced. The program was described as a program primarily to improve teacher education at both the national and local level. Improvement in the schools was more likely to have been viewed as the long-term, indirect effect of the program than its immediate aim. For these and probably other reasons as well, the program's impact on the schools was much greater in terms of their involvement in teacher education than it was in relation to the school's curriculum.

The *Community Involvement Program* was established to involve a greater number and variety of persons, especially low-income and minority group persons, in school programs and programs of teacher education. It was also designed to encourage professionals to interact more frequently with members of the general public and to become active in community concerns. Considering our starting point of no formal program and very little involvement during the first year, we feel we made considerable progress in this area. Strictly speaking, of course, the community is not really an institution or agency in an organizational sense and is indeed difficult to define in any sense. Although personnel from the Community Action Program in Monroe County worked most closely with the project, it could not be said to represent the full range of community participants involved. For this reason, one could legitimately argue that most changes in the community agency are, in reality, changes in individuals and in their patterns of involvement with the profession more than they are changes in community agencies. With this demurral then, let us proceed to examine some of these changes.

First, the TTT Program probably made no lasting changes in the organization and operation of community agencies during its lifespan. We did assist the south side community in the establishment of a physical facility and a limited program while we were in operation, but that has not had and probably will not have any long-term impact. We did encourage and obtain the participation of a wide variety of community agencies and persons in several component programs. Community persons were used in the development and implementation of operational policies and practices for the Program. They served on the policy council of the project and on several other advisory groups in conjunction with specific programs. Some components of training programs were actually offered by specific agencies and in community or agency settings. Some of these arrangements were made by subcontract with the agencies involved and cleared in advance with the Office of Education. Others, of shorter duration, were provided for through the payment of fees or wages to individuals.

What remains of all this depends upon your vantage point. If one looks at our impact on the community agencies and persons, it was probably quite limited. Their impact upon teacher education has, in our judgment, been much greater. We now acknowlege the need within the University to sensitize teachers in training to the needs and values of several communities. Last year, more than 1300 undergraduate and graduate students were provided field experiences apart from student teaching, many of them through community agencies and persons. Indiana University now has a wider variety of communities involved in its teacher education program. It places students in urban black communities, American Indian communities, Latino communities and rural, poor white communities where four years ago its placement program for these communities was minimal or nonexistent. Moreover, the University makes use of persons from these indigenous communities in the training of teachers for these communities. For example, three Hopi and two Navajo resource people staffed a workshop for participants in the Native American Student Teaching Project during the summer of 1973. When TTT began, it was the only program of any significance trying to bring about such involvement; now such involvement is a legitimate and highly respected part of teacher education at Indiana. Thus, from the standpoint of gains, the impact of the community on teacher education has been one of the most significant developments from the TTT programs. More importantly, if better trained people are sent into these communities, it may yet bring about a significant impact on these communities.

It is frankly admitted that our impact upon the *College of Arts and Sciences* and other divisions of the University outside of education has been minimal. Two courses with new content now exist in the Department of Mathematics as a result of our efforts. Credit has been provided students in some of the social science departments of the College of Arts and

Sciences for experiences arranged for and carried out under the auspices of the School of Education. Faculty in The School of Music and the School of Health, Physical Education, and Recreation renewed acquaintances with faculty in the School of Education, but these would be considered minor changes by anyone's standards.

It is difficult to pinpoint the reasons for this. Probably a complex set of factors were operative. The schools represented a comfortable pattern of relationships we could build upon. Involving the community was somewhat of a challenge, and we had some personnel in TTT with definite ideas about involving the community. With Arts and Sciences, well, we just never got there. A more specific reason may lie in the TTT director's background. While he had a dual appointment in the Maxwell School of Citizenship and Public Affairs and the School of Education at Syracuse and felt quite comfortable in dealing with social scientists, he was new to Indiana University during the time when TTT was just getting underway. Thus, his knowledge of persons and programs who might be receptive to involvement in TTT was quite limited and remained so during the critical, formative years.

The strategy of involving gatekeepers may also have some limitations which need examination. During the first year in which the TTT proposal was developed, we were able to involve most of the top leadership figures in the cooperating institutions. In the schools, it was the Superintendent and his staff; in the community, it was the director of the Community Action Program. In the university, it was the Dean, and Associate Dean in the School of Education, the Dean and Associate Dean in the College of Arts and Sciences, and the Vice President for Instructional Development. While this strategy certainly made for a strong commitment of these institutions at the policy level, it may have hindered the development of involvement at the operational level. No matter how much these individuals purported to represent the persons and ideas of their respective institutions or units within institutions, the ideas they presented were inevitably *their* ideas and the commitment to them was *their* commitment. For future projects of this kind, it may be wise to consider a variation of this procedure, making use of the gatekeepers to obtain the basic commitment to develop a proposal and then moving immediately to the "lower" levels in the organization for the operational ideas and the commitment to implement them. This is in effect what happened in the School of Education although the Dean and his staff continued to be involved and interested. In Arts and Sciences, perhaps because of its sheer size, or for other reasons already discussed, commitment did not develop as quickly or as completely as it did in Education.

These observations are not intended to lay blame at anyone's doorstep. For those who need someone to blame, the TTT staff and particularly its director are willing to assume the responsibility. Beyond blame is the more important issue of why Arts and Sciences and other divisions of the University were not as affected by the program as most of us would have liked. It is to this issue and to this issue alone, that these tentative explanations have been addressed.

Conclusions

It is clear from the earlier discussion that the Indiana TTT Program has had a substantial impact on several local institutions. The greatest impact has occurred within the School of Education; the least, within the College of Arts and Sciences. The project's impact on the schools, though not as substantial as we may have hoped, continues to this day. In some ways, TTT's impact upon the community may have been the most significant of all. The project began with essentially no input from the community and evolved to the point where many activities in and with the community have now become legitimized through the establishment of a Center for Experiential Education within the regular program and a community agency oriented course. Perhaps it would be useful to conclude this chapter by examining the process of institutionalization — how it occurred and why — in a little more detail. First, there is a single significant fact: five of the major program components are still functioning even though TTT as an operational program at Indiana terminated more than two years ago. To our knowledge, this is an unusual record of institutionalization. Why did it occur?

The reasons are not easy to come by if one wants concrete and objective data to confirm them. It is easy, however, to trace some of the developments that appear to have contributed to this outcome. While these have a certain element of subjectivity to them, they do seem plausible from all that we know about how change occurs. One further point. They do represent the unique combination of factors present at Indiana University during a given period of time. Many will suggest that this gives them limited generalizability. While this conclusion may apply to this set, the important thing to remember is that a similar set of factors probably exists in every institution deeply involved in change. The task is to identify them and to use them to institutionalize the new programs that are being implemented. If a critical mass of such factors does not exist — and no operational definition is available for when a mass becomes critical — institutionalization is less likely to occur or to last if it does occur. The ten factors identified below represent the unique set for Indiana University's School of Education during the last three or four years. Some of these would not necessarily still be factors at the present time. There is no significance to the order in which they are presented:

During this period of time, the leadership and faculty of the School of Education had become concerned about the undergraduate teacher education program of the School. Many felt that a considerable imbalance had developed over the years between the resouces and personnel devoted to graduate education and those devoted to the education of undergraduates. After studying the situation for more than a year, the faculty resolved to create a Division of Teacher Education within the School. Its purpose was to give greater visibility to the needs of undergraduates and to stimulate faculty interest and involvement in such programs. Many experimental programs such as TTT already existed and provided an initial nucleus for the organization and activities of the Division. Thus, TTT and other programs reinforced and were reinforced by the development of the new division and the general faculty support that it represented. Incidentally, this does not imply that there weren't some intense struggles within the faculty over this development. There were! But these struggles usually revolved about the conflicting needs and interests of individuals and small groups rather than the faculty as a whole. Indeed, some persons involved largely or entirely in graduate education, particularly at the doctoral level, often took a rather ho-hum stance unless they felt the new thrust in undergraduate education was going to deprive them of resources. In sum, then, there was a movement to improve the undergraduate program which did have sufficient support—albeit not without struggle—to accomplish the establishment of a new division. This development was certainly supportive of TTT.

Persons in positions of leadership within the School of Education as a whole were generally sympathetic to the continuation of TTT programs and practices and provided moral, financial, and personnel support for this to happen. This was particularly true of the Dean (David L. Clark), the Associate Dean (Egon Guba), the newly appointed Director of the new Division of Teacher Education (Leo Fay) and several other division and department heads. Persons in leadership positions in the schools, in the College of Arts and Sciences, in the Community Action Program, in other parts of the University, and in other community agencies were also involved but their involvement was not critical to the issue of institutionalization of the programs within the School of Education. One of the principles often mentioned in the change literature and an axiom of the national TTT Program is the need to keep the gatekeepers informed and involved in experimental programs. We believe that TTT was fairly successful at doing this.

A climate of experimentation and change was generally supported by the faculty of the School of Education even though individual faculty may not have agreed with the directions a specific program was taking. A supportive environment is absolutely essential both to the trial and the adoption of new ideas and practices.

The TTT programs were not earth-shattering departures from the norms of the institutions involved. They were not as threatening to individuals and institutions as "far out" programs may have been. As a result, they were more readily accepted both in the beginning and at the time they were institutionalized. One of the facts that change agents have to face up to—like it or not—is that change is more likely to be accepted or at least tolerated during the experimental period and adopted when experimentation is over if it does not represent a great departure from the norms of the institution involved. This fact does pose a dilemma for change agents because it may require them to compromise on their positions and programs—that is, to make them less "pure" than they would like them to be. While compromise appears essential if the program is to be institutionalized, there is no need to abandon one's principles altogether. By carrying on a continuing dialogue with persons who do not share your views, you may be able to win them over to your right to act upon them. This is about as much as any of us has a right to expect.

There was a willingness on the part of the TTT staff to revise programs during the initial stages of institutionalization so that these programs could be carried on within the existing framework. The revisions tended to move the programs still further in the direction of existing norms. This required flexibility on the part of persons who had become committed to specific forms of programs. Some of the changes were necessitated by the dearth of supplemental funds originally available through the federal grant. Load considerations and administrative convenience represented still other factors. Perhaps a specific illustration would make this issue clearer. A year in advance of the time when the TTT grant for the operational program was to terminate, the staff began to examine ways of making the program more cost effective, realizing that this had to be done if the program was likely to continue. After considerable thought we decided to present several options to the public school teachers involved. As the discussions continued over a period of time, it became apparent that the teachers were not really excited about any of the options and particularly one that involved doubling the number of students enrolled in the program by assigning two instead of one per teacher. In the long run, however this plan was accepted 1) because we could demonstrate its effects on cost, 2) because teachers really wanted to see the program continue and 3) because the plan did not require doubling the work of teachers. (Incidentally, this particular revision was a movement away from institutional norms since no other program before or since has placed two student teachers with a teacher during the same period, although this is done occasionally for observation experiences.) The Professional Year Program of TTT continues to do so to this day.

The illustration in the last item documents one other necessary condition. The staff of any experimental program must be concerned enough about institutionalization to think about and plan for it well in advance of when it needs to happen. The process of reaching a decision that was acceptable to all of the parties involved in the doubling of students in the program required a period of well over six months. Any attempt to begin this process at the point when institutionalization was imminent probably would have resulted either in a discontinuation of the program or a prolonged period of friction and discontent when the program was quite vulnerable.

Frequently, the staff involved in experimental programs are so preoccupied with issues of implementation that they fail to address themselves to the problems associated with continuing the program when the outside support is discontinued. Some scholars have even hypothesized an "entrepreneurial type" who get their kicks out of starting programs only to turn their attention elsewhere when the program is operating on a solid footing. The funding patterns of the federal government and other agencies and the frequent failure to respond to "proven" programs on the part of institutions of higher education have contributed to the brief life expectancy of experimental programs. Moreover, the reward patterns within universities encourage faculty to flit from flower to flower in order to build their own supply of honey (pay increments, promotion, tenure, job offers, etc.)

Some of the program components were picked up and continued by persons other than those who originated them. Some of these persons became part of the TTT staff after the programs were operational and others, never involved in TTT at all, were intrigued by the potentialities of a program and took it on during the institutionalization period when it was no longer associated with TTT. These newcomers brought fresh ideas to the program and definitely were not as committed as the "true believers" to whatever TTT tradition had evolved. They were able to look more objectively at the needs required to make a program respectable within the framework of the existing institution. Also, they probably were perceived as less radical than those who had raised hackles on numerous occasions in the past.

By luck or genius—more likely the former—the TTT Program managed to anticipate and capitalize upon many of the developments that were taking place within the School of Education during the same period. It is quite conceivable that TTT even stimulated or at least fueled some of these developments. For example, during the last four years at Indiana, a much greater emphasis has been placed upon field-based programs in teacher education. TTT through its Professional Year Program, its Urban Semester Program, its Secondary Mathematics Program, its Multiple Arts Program, and its Community Involvement Program was an early advocate and model of field-based practices. It also initiated or participated in the development of urban education, the involvement of the community, the use of the saturation principle in placing students in schools, the meaningful involvement of low-income persons in teacher education, the development of a supervisory training program for teachers, and many other items that are now accepted practices at Indiana University.

Some personnel in the TTT Program acquired leadership positions during or after their involvement in TTT. One became chairman of a major department; two others became involved as director and co-director in new projects, and two others became members of the Field Associates Team, a newly organized group providing field services to undergraduates in the Division of Teacher Education.

These positions provided opportunities to extend TTT practices or to initiate new programs which applied similar models and helped to reinforce the climate of support for TTT.

Supplemental funds continued to be available—though on a much smaller scale than during the project—for the continued operation of the program components through an institutional grant from the Office of Education. These funds permitted a smooth transition to take place from experimental to institutionalized programs. Perhaps funding agencies should gear the distribution of their funds to this specific phase of the program, particularly if they expect and desire institutionalization. For example, a certain percentage of funds could be reserved for specific use during the institutionalization period.

All references to TTT were dropped during the institutionalization period so that program components carried titles that were largely indistinguishable from those in the regular program. During the experimental period in which TTT was in operation, frequent expressions of resentment were often voiced by non-involved faculty about the money being spent by the TTT Program. That stigma, and others associated with innovative programs, was quickly erased with the adoption of new titles and local patterns of funding. The affluent suddenly had to live on the same limited budget to which everyone else had become grudgingly accustomed.

It is difficult to say how many of these items could have been missing from the picture before the institutionalization of these programs would have been seriously impaired, but it seems reasonable to conclude that in combination, they paved the way for institutionalization to occur.

Perhaps the best way to conclude this chapter is to go back to a summary statement prepared by the University of Virginia's Evaluation Research Center, one of the groups employed by the Office of Education to conduct evaluative studies. The entire summary is quoted below:

> The Indiana TTT project, with its very diverse focus, seems to have been successful in achieving the changes it originally planned to achieve. The documentation sent to validate these changes serves this purpose very well in most cases. It appears that this project is focused primarily on the T and TT range of participants.

This quotation does not emphasize institutional change, but that is understandable since the data was gathered fairly early in the operation of the

TTT Program. The evidence presented in this chapter suggests that the institutional changes brought about by the Program may be its most dramatic achievement. Hopefully, these changes will continue to generate even more significant spinoffs in the future.

VI References

1 Third-year renewal proposal submitted by the Indiana team to the Office of Education, November 11, 1970, p. 13.

2 *Ibid.*, p. 15.

VII Recommendations

Traditionally, the last chapter in a book of this kind provides a summary of the major findings and presents some conclusions based upon them. We have chosen to depart slightly from that procedure by presenting a series of recommendations. It is our hope that these recommendations will orient the reader to the future rather than the past. Summary is not avoided altogether. It is frequently built into the recommendations in the form of background information and justification.

The recommendations are addressed to federal agency personnel, local project personnel, and local agency personnel who are in leadership positions. Many recommendations are of value to more than one of these groups, but to avoid duplication, we have listed them with the group that seems most appropriate.

Each recommendation is based upon our experience in the TTT Program as we perceive it having transpired at both the national and local levels. Some recommendations are directed at the process; others speak to the results. All are presented in the spirit of constructive suggestions to persons who are interested or involved in bringing about improvements in teacher education.

To Federal Agency Personnel

The recommendations which follow are addressed to a variety of persons under the rubic of federal agency personnel. Some of them are persons who administer programs such as TTT and its parent EPDA program. Included in this group are LTI leaders, evaluation personnel, and other consultants employed by federal programs. They, in turn, report to gatekeepers in the Executive Branch of government, persons who establish policy for these programs. Both the gatekeepers and the program personnel also look to Congress for continued support for their policies and programs. While most of the recommendations are addressed to program personnel and their consultants, they have implications for the other groups as well. Finally, some of the recommendations may be generalizable to personnel in private foundations and funding agencies.

Realistic Time Frame for Educational Change

Some process needs to be devised to inform the Congress and persons in leadership positions in the Executive Branch of government of how long it takes to build an educational program of TTT magnitude at both the national and local levels. It cannot begin in an undernourished state, receive a subsistence diet for two years, become aware that it will die in two more, and blossom into vigorous maturity in the meantime. Yet five such years appears to be a fairly typical lifespan for federal programs. Local projects may be even shorter. It is a wonder that these programs have any impact at all under such conditions.

Funding for Planning

Funding strategies should take into account the peculiar nature of the planning period. More than any other, this period should be one in which the participants are provided the opportunity to extend their imagination—to dream a little and look beyond the limitations and constraints of the field. Unfortunately, most local project staffs are only given the opportunity to plan within the constraints of proposal preparation. If Office of Education personnel could provide a more extended period of planning—after the grant is made and with funds available for the purpose—more coherent programs and greater parity might be the results.

Expectations of National Agencies

These authors recommend that national agencies do not create unreasonable expectations with regard to levels of funding on the part of persons submitting proposals. Local personnel do tailor their plans and budgets to the expectations which funding agencies create. If agency personnel indicate that they plan to distribute six million dollars in ten or twelve grants and that they expect programs of considerable magnitude, that is precisely what local personnel will deliver. If such expectations are considerably off the mark when funds are distributed, some disillusionment is likely to ensue. The easiest way to avoid this is for federal agency personnel to anticipate the actions and reactions of Congress and other key persons and to establish realistic budget expectations in program guidelines.

Federal personnel need to become more aware of the evolutionary nature of a national program and the impact that evolution is likely to have on local projects. Some of the issues that arise from the developmental interplay between the national and local programs were detailed in the early part of this book. The message that emerges is the need to provide sufficient lead time for local projects to study, understand, and respond to changes at the national level. Particular attention should be paid to the relationship between proposal preparation and program implementation. In the TTT Program, we began developing proposals in the summer of 1970 which were to become programs in the fall of 1971. If new directions came to us from the national program in the fall of 1970–the need to stress community involvement for example–they could not be acted upon in any meaningful way until the summer of 1971, and they could not be incorporated into the program until the fall of 1972.

Hard as it is to believe, this is a two year time lag. We are not advocating that nothing can or should be done in the two year period that intervenes, but any major implementation cannot begin until two years later. The reason is simple. Money and planning time are required to finance a major change in program. Since funding requests have already been submitted for the following year, it is unlikely that any program not already called for will emerge at that time. To do so is to thwart all the planning that went into the current proposal. A major planning effort and some limited actions can be initiated at the local level and probably will be if project personnel are at all serious about the new directions, but these are not the sort of activities that represent a major change in program. Admittedly, the time lag could have been reduced substantially if the announcement had been made a few months earlier, but this only reinforces another point: that national program personnel must time their announcements carefully to be effective in promoting change in local programs.

Providing sufficient lead time and timing announcements carefully will go a long way toward resolving the problem, but there are other steps that can be taken. New expectations should be stated in clear terms. It is not always easy for project personnel to discern the difference between "required" and "suggested" changes, and sometimes expectations stated as suggestions are interpreted as requirements by both local and national personnel. By stating its intentions clearly, the Office of Education will not be penalizing those who decide not to follow such "suggestions."

A set of "trail markers" should be provided to aid project staffs in determining when they are making appropriate changes. Even when local personnel want to follow the spirit of federal guidelines, they may not find it easy to do so. Specific trail markers will help them to know when and where progress is being made. The relatively vague concept of community involvement, for example, might have been clarified by the following trail markers:

Increase the number and variety of community volunteers participating in teacher education.

Involve community persons in policy making roles.

Pay community persons for their involvement.

Place community persons into key project positions.

Spend a reasonable proportion of project funds for community personnel.

Finally, national program personnel should take into account the entire range of projects that are operative at the local level and reflect such an understanding through appropriate variations in procedures. This may require the establishment of different guidelines for different types of projects or accepting different procedures for meeting the same guidelines. This probably will not come as a completely new suggestion to federal personnel. Indeed, many may feel they already do such things. From one project's point of view, they could be done even more thoroughly.

Funding Cycles

The preceding discussion suggests another recommendation: that careful thought be given to the possibility of revising federal funding cycles. The annual cycle has several problems associated with it. In the first place, renewal proposals must be submitted before the latest program has begun and often well before there is enough experience to know what new needs and problems have emerged. Moreover, far less than a one-to-one relationship exists between program planning and proposal preparation. Indeed, these two sets of activities often emphasize, if not require, quite different skills. One calls for persons who can create and implement new ideas; the other, for persons who can articulate and "sell" those ideas. Ideally, the latter process should be based upon and emerge from the former. Under present patterns of funding, the reverse is often true. A longer funding cycle would make it possible to escape from these constraints by allowing more time for program development before the next proposal is due.

A number of alternatives to the annual cycle should be explored. For example, *renewal proposals* could be prepared by local personnel on a biannual basis while *new requests* are entertained annually. Continuing requests could also be staggered to permit more careful scrutiny of programs up for renewal each year. If a biannual cycle were adopted, one half of the programs could be examined each year. Another variation would be to entertain only requests for major program revisions each year while the original level of support continued for a two year period. A number of such alternatives should be given careful study at the national level.

Support Vehicles

Support vehicles should be established as part of any large-scale national program of funding. Such support vehicles should be carefully designed to service both the needs of the national agency and of local projects as well. The Office of Education staff deserves credit for establishing perhaps the broadest array of such vehicles ever developed for a national program of funding. Included were the Leadership Training Institute, the cluster organization, the program of conferences and workshops, and the national evaluation effort. However, these vehicles did appear to serve the needs of the Office of Education much more than those of local projects. Special attention needs to be paid to identifying and responding to local needs if support vehicles are to be effective in serving them.

Staggered Evaluation

We recommend that national programs give serious thought to the principle of staggered evaluations. Simply defined, staggered evaluation means that data be collected from one group of projects in the first round, a second group in the second round, and so on. How often the cycle would be repeated would depend upon the need for data, the number of projects being funded, and similar factors.

This recommendation has several things to commend it. First, it would result in a more rigorous program of evaluation with a small number of projects involved each time. More data would be available since different sets of data could be acquired in each round. If desired, some sets could be repeated each time for cross-validation and other purposes. Local projects would be less burdened by the effort since each would be required to respond to only a part of the whole. The evaluation effort would be less expensive and data collection and interpretation would be more manageable. Moreover, samples could be drawn for special studies on the basis of such project characteristics as location, university size, type of program, and so on. An evaluation schedule, drawn early in the process, would permit project staffs to anticipate data collection efforts well in advance of their implementation. Even some undesignated efforts could be incorporated for unanticipated needs. This recommendation is based upon the assumption that not every project must be evaluated at the same time for funding purposes. Even if this assumption is rejected by national agencies, staggered evaluations could be employed by the national staff for other data collection purposes.

Emphasize Quality in Evaluation

In data collections, greater emphasis should be placed upon quality rather than quantity. This criterion should be applied to both national and local evaluation efforts. With programs as complex as TTT, there is the danger of evaluation overkill—too much evaluation for the needs of the individuals and groups involved. Emphasizing quality rather than quantity and providing coordination for the various efforts will help to reduce the likelihood of evaluation being used for its own sake rather than for some purpose outside of itself.

An emphasis on quantity often reflects poor planning. When the specific objectives of evaluation are not identified in advance, there is the urge to collect as much data as possible in the hope that some of it will be useful. While such an approach does yield data of value, it is a terribly inefficient way to obtain it and may produce some backlash effects as well. Proper conceptualization not only provides for a better balance between quantity and quality, it also results in a more efficient design for data collection. The discussion of staggered evaluation is very much directed at this point.

Feedback

Data collected for national purposes could be of considerable value to local project personnel. To be of maximum value, three conditions must be met. The data must be presented in understandable form. It must make use of a variety of communication vehicles. Finally, it must be timed to the needs of local projects.

By tradition, evaluators tend to be well schooled in the collection and presentation of data but not in the communication of its meaning, a skill closely allied to instruction. From the point of view of local projects, communication skills are equally important. In order to act intelligently on data, the different publics involved at the local level must know clearly what the data suggest in the way of problems, issues, and directions and what alternative courses of action exist. A number of tables accompanied by a brief narrative summary does not perform this service. A carefully planned program of feedback is necessary. Such a program should 1) be carried on with persons having expertise in communication skills, 2) simplify the presentation of data, 3) make use of slides, tapes, and teams of communication specialists to explain the data, 4) assist local personnel to plan appropriate actions, and 5) provide such feedback over a relatively short span of time. Data gathered in the fall of one year and redistributed in the spring could be useful for program planning purposes for the following year. While such a program places greater emphasis on communication than many may feel is necessary, some of the costs could be offset by collecting less data of higher quality. Presumably, such an approach would have value as well in communicating to Congress and within the Executive Branch of government.

Evaluation Backlash

Provisions should be made to prevent or reduce the effects of evaluation backlash. Programs as complex as TTT are particulary prone to this effect. Several evaluation efforts at the national and local level require responses from the same set of persons at the local level. These are also the persons on whom the training program is making the greatest demands. If the burdens become too great, the result will be lower response rates, hurried responses, growing resistance to evaluation, and a general feeling of resentment which, taken together we have termed backlash. When feedback in easily understandable form fails to reach these persons, as may often be the case, the intensity of the backlash mounts.

There are several measures that could be tried to counter backlash. One possibility is to collect a smaller quantity of data during the course of the project. Presumably, this will require fewer collection efforts as well. Staggered data collection will help to reduce the total quantity of data and place even fewer demands on a given project. Finally, coordination of the local and national approaches to evaluation may also help to accomplish this objective. Considering the potentially negative effects from backlash, the implementation of any of these suggestions would seem well worth the effort.

Demands on Local Project Staff

Federal agency personnel need to become more aware of the many demands being made on local project staffs and of the impact of these demands upon the local program. When project staffs are expected to attend conferences, complete data forms, prepare proposals, develop articles for newsletters, and implement a local program—all within the same time frame—they may be hard pressed to find time. Frankly, the Indiana staff placed its priorities on local activities. While this may not have been wise from a political standpoint, we tried to respond in some way to every request from the national program or its representatives. Timing is particularly critical. There were two important instances when we felt that the timing of Office of Education actions was inappropriate. One was the announcement of an early site visit and the other was the initiation of three separate evaluation efforts in a brief span of time. Given better timing, some of these events would not have been as onerous as they were. Granting all this, federal personnel should realize that demands are heavy and requests should be both thoughtful and timely.

To Project Personnel

These recommendations are designed to have special significance for persons who either are involved or are planning to become involved in the development and implementation of experimental teacher preparation programs. They are particularly applicable to field-based programs which receive full or partial financial support from funding agencies.

Reduction of Outside Funds

Those who are charged with the implementation of a field-based program must plan for an inevitable reduction in outside funds. Such plans usually make use of one of two approaches—or a combination of both. One approach is to reduce activities to match the reduction in funds. This usually means that institutionalized programs are quite different from those that were operational during the period of heavy funding. They have to become more like the "regular" program in order to function with limited funds. A second approach calls for a gradual shift in the allocation of funds. Initially, the heavy costs are borne by the outside funding agency. Toward the end of the experimental period, the local agencies are expected to bear the major burden of the costs. While this approach may be emphasized by some funding agencies, there is seldom enough follow through to make it work. Moreover, local agencies have a variety of means at their disposal to thwart the basic intent of this approach. Perhaps the most that a project can hope for is a combination of the two approaches. Funding agency insistence on local funding does provide project personnel with some leverage in dealing with local administrators. Often this means an increased level of support from local sources. When increased local support is coupled with a reduction in activities, the program does have a reasonable chance of survival in institutionalized form. Still, a number of refinements and new approaches need to be made to this most critical problem.

Building Stability and Flexibility

Establish procedures for insuring both stability and flexibility in the new program. Stability is necessary to recruit new staff and students to the program. If either group perceives the program as lacking in direction, participation may be reduced to a critical point. Moreover, the wide variety of personnel usually involved in field-based programs have a right to expect certain features to remain constant for at least a year and others, for the life of the program. Evaluation, too, is built upon similar assumptions. However, if nothing is open to change, then program personnel can not learn from their mistakes and this would be intolerable. Furthermore, new staff are not likely to join in programs which they are not permitted to change. Nevertheless, most programs do have some basic assumptions when they begin, and unless these remain inviolate, there will be no test of these assumptions. The trick is to evolve a set of procedures which will strike a delicate balance between these opposing needs.

Identify Institutional Change Goals Early

Institutional change goals must be identified early if important institutional change is to be brought about. As professionals, teachers at all levels are aware of the fact that individual change is most likely to occur if it is planned in advance. It is strange, then, that many professionals expect institutional change to "just happen" without benefit of human thought or intervention. An explanation for this state of mind may be found in the fact that traditionally, teachers do not concern themselves with institutional change. As a result, institutional change goals tend to be ignored in teacher education programs. It is a credit to the Office of Education that they recognized this as one of the weaknesses in the NDEA institute program which trained many individuals but brought about relatively little change in institutions.

Chances for institutional change will be considerably enhanced by a formal statement of institutional change goals, developed early in the program and the initiation of systematic procedures designed to bring about these goals. Some opportunities will emerge during the course of the project, and they must be recognized and acted upon when they become manifest. If Indiana's experience is any indication, institutional change produces a ripple effect—that is, it brings about additional changes which are difficult to anticipate in advance. Further, it aids the attainment of individual change goals. For all of these reasons, institutional change goals are definitely worthy of the early and continued attention of project personnel.

Involving Gatekeepers and Operatives

Program personnel should be certain to involve both the gatekeepers and the operatives in the planning and implementations of field based programs. Gatekeepers are leadership personnel such as the superintendent of schools, deans, department heads, and vice presidents within the local institutions. Because such persons can open or close the gates to institutional participation and change, it is imperative that they be involved in planning and implementing experimental programs.

Gatekeepers determine whether a program is permitted to begin and to continue, but they seldom have the responsibility to carry it out. This is a task for the operatives—teachers, principals, professors, graduate students, and community persons. If the gatekeepers represent the formal power structure of the institutions involved, the operatives represent the informal power structure. It is important to involve the operatives early in the planning of the project so that they can bring their insights to bear on the problems of that period and feel some responsibility for carrying out the program that emerges. If the gatekeepers make most of the decisions during the planning period, the operatives will feel no great compulsion to participate and may do so only at the most superficial level of performance.

Parity in Planning

Parity in planning is a particularly important goal since its achievement will help to pave the way for the continued involvement of parity groups in later phases of the project. Conversely, if parity is not achieved in planning, it probably will not be achieved in other areas of project implementation.

There are two aspects to parity that should be given consideration during the planning phase. One of these is the meaning promulgated by the Office of Education guidelines: parity is equal or near equal involvement on the part of the major groups—School of Education, College of Arts and Sciences, public schools, and community. (Students were sometimes mentioned as a fifth group.) While it is not difficult to involve representatives from each of these groups, it may be near impossible to obtain a parity commitment from each of the individuals involved.

At Indiana, dis-parity occurred in another form: initially, the gatekeepers were more adequately represented than the operatives, particularly from some parity groups. This made for a relatively strong institutional commitment at the policy level and a relatively weak commitment at the operational level. During planning, the operational commitment was probably weakest in Arts and Sciences. (As we have pointed out elsewhere, the community was not operationally involved at that time.) While the situation improved somewhat with the passage of time, it was never completely resolved. Parity planning by leadership figures and operatives will lead to greater commitment on the part of both groups when it comes time to implement the plans.

Openness in Faculty and Student Recruitment

Be as open as possible in recruiting personnel to the new program. In our situation, it was imperative to obtain persons who were interested in implementing ideas in field-based settings. Paint a realistic picture of what they will do, how it will be done, how many hours a week will be involved and so on. Frankly, not everyone is suited to working in field-based programs. To soft pedal the significant characteristics of the program in the hope of getting someone involved is to invite poor performance and dissatisfaction when the person assumes his actual responsibilities.

Dissemination

A comprehensive program of dissemination and demonstration activities should be implemented early in the project. Unless this is done and personnel provided time to carry out this function, it probably will be given short shrift as a nonessential activity. Actually, from a political point of view, it is anything but nonessential. At the local level, the project depends upon the continued goodwill of the public and the profession at large to continue to function. Such goodwill is more easily sustained through a deliberate program of information. Without it, there is the possibility that gossip, rumor, and other second hand sources will represent the chief avenues of information. We all know from personal experiences the exaggerated information and distorted insights that can be obtained from such sources. A thorough program of dissemination activities will keep key persons informed at every level, giving them the ammunition they will need to correct mistaken impressions.

A comprehensive program of dissemination must go beyond the printed word. Films, television, radio, and personal presentations provide additional avenues for getting out the word. Demonstration activities are particularly important and should be planned for during the experimental period. It is at this time that the program has more life and vigor and personnel more enthusiasm than the later, more traditional, demonstration period when the program has been refined and is being institutionalized.

A comprehensive program of dissemination requires resources to function effectively. Yet dissemination activities are seldom seen as legitimate by funding agencies, particularly during the early stages when programs have not been "proven." Agencies need to revise their thinking about the appropriateness of dissemination activities. They must stop viewing them simply as ways of reporting results and start seeing them as vehicles of communication between experimental groups and within the profession at large. Project personnel can assist them to make this adjustment by requesting and justifying funds for this purpose early in their program's development.

Plan of Evaluation

A comprehensive plan of evaluation should be established during the planning period and implemented as soon as the program is implemented. While this seems like a simple recommendation on the surface, it has a number of difficulties associated with it. First of all, many evaluation specilists are still trained in classical research procedures calling for the use of experimental and control groups. Such procedures are seldom applicable to field-based programs in teacher education. While other approaches exist, persons who are trained in their use and who have some practical experience as well are few and far between.

Beyond the problem of finding a qualified person is the difficulty of involving program participants—both staff and students—in the various stages of the evaluation process. The first step is one of the most essential and most difficult—conceptualizing the role of evaluation and the evaluator in the project. This must be carried out in such a way that all participants understand the process and are committed to it. Decision making is one use to which evaluation is frequently put. When this focus is important, as it was in the Indiana TTT Project, the staff and participants must know what the broad decision categories are, what specific decisions need to be made, when they need to be made, and what information will be of value in making them. If this information is known only to the evaluator and a small group of administrators, it may be difficult to collect the necessary data or to make the most appropriate decision after the data has been obtained.

The role of the evaluator is also important. If he is only going to design instruments and collect data—an oversimplified but frequently stated version of what evaluators do—he will be viewed as a mechanic and neither his role nor his data will be taken seriously. On the other hand, if he is viewed as participating in the conceptualization of the program, in assisting the group to articulate its needs and goals, in identifying an array of alternatives from which decisions are made, and in providing feedback on what happens once a decision is chosen, then he will be considered a highly valued member of the team.

Frankly, we don't presume to have acquired all the answers in this area. Partly, it's a matter of how project administrators view evaluation and the evaluator. Certainly, it's a matter of how comfortable the evaluator himself feels in the various roles. What is certain in our mind is the need to plan and carry out a program of evaluation with care equal to that of planning and carrying out the instructional program itself.

One further point. A local plan of evaluation must be consonant with the needs for data at the national level. Otherwise the two groups will work at cross purposes to one another. It is especially important to remember in this regard that the same individuals invariably provide the data for both levels. As a result, if coordination is not worked out carefully in advance, there is a real danger that resentment will build and a backlash occur.

Make It Easy to Participate

Many programs in teacher education expect participation from a broad and varied group of people. Participation is not an end in itself, of course, but it is an instrument to other ends. In the Indiana TTT Project, professors were asked to teach methods in the elementary school setting not with the thought that "just being there" was going to bring about change but with the idea that they would participate with the teachers and the teachers with them.

The daily routines of teachers often make it difficult for them to participate in methods during the school day. Since they tend to resist staying after school to do so, some means must be found to make it easy or at least possible for them to be involved. In TTT, we explored ways of deploying student teachers (two to a room, for example) so that teachers could meet for brief periods without leaving classes completely unattended.

One form of participation frequently used is to request reactions, suggestions, and other items of feedback at periodic intervals. However, the disposition of these suggestions and reactions was not always clear. Sometimes we thought we had responded to a complaint only to find it emerging again at a later date. Systematizing the practice of informing individuals and groups about the disposition of a matter—who tested it, when and where, and with what result—will help to encourage continued interest and participation in the future.

To Local Agency Personnel

The recommendations which follow should be of value to local agency personnel other than those who actually carry out a project. They should be of special significance to superintendants, deans, department heads, and other administrators in local institutions. Project personnel and others may find them of interest as well.

Commitment to Program and Personnel

Local agency personnel, particularly those in leadership positions, should make their commitment to experimental programs a clear and visible one. There are several ways in which this can be done to convince faculty that such a commitment exists. Perhaps the most obvious vehicle for this purpose is public statements from leadership figures. Continued references to the value of experimental programs creates an excellent soil for such programs to flourish. Actions are even more important. Programs must be provided with adequate budgets, personnel, and other resources necessary to do the job. Give the persons who participate in such programs visibility through press releases, articles, appearances at professional conferences, and similar means. Encourage them to participate in the recruitment and selection of new staff so that a more cohesive group of persons may be engaged in the work. Finally, help the personnel in experimental programs to obtain increments in salary, promotions, and other emoluments as rewards for their work.

Rewards to Public School Personnel

This discussion is really a continuation of the one begun under commitment. The subject of rewards is important enough and varied enough to warrant separate treatment. We recommend that more attention be given to the identification and employment of suitable rewards and incentives for teacher participation in teacher education programs. This issue is particularly critical in programs that expect teachers to assume roles with a greater variety and magnitude of responsibility.

If teachers are to continue to invest significant time in the preparation of pre-service teachers some combination of the following conditions should prevail: (1) universities must repay teachers by providing demonstrations, new materials, innovative curricula, and convenient in-service education courses; (2) supervising teacher monetary reimbursement must be increased—possibly by eliminating most on-campus student teaching personnel and redistributing their salaries to well qualified supervising teachers; (3) research must establish that children receive more individual attention and learn more because student teachers are present in classrooms; (4) team teaching models must be devised and used so that student teachers supplement rather than replace the supervising teacher; (5) universities must devise a variety of additional incentives—academic credit, parking stickers, remitted tuition, appointments as adjunct faculty, reduced prices for athletic and cultural events—to encourage expanded participation on the part of teachers.

In schools, the process of giving recognition is complicated by the fact that teacher education has been perceived as something one could do with the left hand, much as a university professor takes on a consultancy. Even if the daily routine can be rearranged to permit greater involvement on the part of teachers, there is little incentive for them to do so. Indeed, if they acquire too much visibility in their roles as teacher educators, administrators and board members may begin to wonder whether they are doing their job of teaching children. This issue must be recognized and addressed early enough and clearly enough to convince teachers that participation will be rewarded. Both the school and university administration must work together to find satisfactory solutions.

Rewards for University Personnel

Despite what they say, universities still make use of mechanisms and procedures that discriminate against those who work in experimental programs. They fail to recognize the amount of work involved, they make use of standard definitions of class hours in computing work load, and they continue to weigh reports about programs more heavily than participation in them for such crucial decisions as promotion and tenure.

Administrators can do more about some of these deficiencies than others. Tradition and faculty control do tend to limit their powers in dealing with promotion and tenure. They can and often do offer encouragement and advice to faculty who are about to run this gauntlet, but probably no more so than they do with good faculty who work independently.

The real power of administrators lies in providing salary increments, travel funds, graduate assistants, and similar forms of reward. These rewards provide for more immediate reinforcement than the relatively long range opportunities of promotion and tenure and are of particular value to junior faculty. Unfortunately, for the point being made here, such rewards are seldom distributed evenly to those who participate in such programs. Perhaps what is needed is something akin to war-zone pay allowance in the military or the "inconvenience of working nights" allowance of industry. It might be termed the get-off-your-duff incentive or the labor-of-the-field incentive. To be an effective motivator, it should be given to everyone who participates in field based programs and be in addition to any increments for merit. In these days of budget cutbacks at universities, there is little likelihood that this will happen in the near future, but it illustrates the kind of action required to deal with the rewards issue.

Role Clarification

Role clarification must be undertaken early and carried on regularly throughout the course of a field-based program. The basic issue in need of clarification is who is going to do what to whom and under what circumstances. A prior issue is who's going to decide who does what to whom. If public school teachers are going to be involved in teacher education beyond the ways in which they usually are, all parties need to be aware of this well in advance of it being done. The same point holds true for the participation of methods instructors in elementary school instruction and curriculum development.

Role clarification also involves the process of how decisions get made. If majority vote becomes the rule, the teachers probably will decide what issues are important and what will be done about them. If meetings are avoided and individuals "polled" in the hall, professors may hold the upper hand in decision making. One of the principles that emerged from the Indiana TTT Project is that power follows time and perception. When teachers remain in their rooms with pupils for the entire day, they are not likely to have much impact on decisions about the teacher education programs. They simply don't have the time to get involved. Moreover, when their role is not conceptualized as training teachers and they are not paid to do so, they are not likely to perceive themselves as having much power to make decisions in teacher education. Properly applied, role clarification should help each group to see its responsibility in the other's domain. Without clarification, the decisions, activities, and results will continue to be compartmentalized as they always have been.

Integration of School and University Efforts

The missions of the school and university were not highly unified in the Indiana TTT Project. Teachers participated in the training of prospective teachers, and professors and graduate interns participated in the instruction of children, but neither departed very much from what had been done in the past either in the amount or variety of their efforts. In the future, if field-based programs in teacher education are going to go beyond where they are right now, additional time, effort, and resources need to be devoted to this question.

Local institutional leaders should consider the award of significant amounts of graduate credit to each member of a school-university team that collectively conducts a needs assessment, selects an innovative instructional program, fully implements that program, and evaluates the result. Courses that feature talk about innovations have rarely led to the accomplishment of innovation. Why not offer some courses that consist of "doing"—of installing and evaluating a major innovative practice? Let the talk be integral to the doing.

The potential of this recommendation would be enhanced considerably if schools and universities coordinated portions of their budgets to achieve maximum impact. A few instructional kits provided for the purpose of training prospective teachers cannot sustain permanent or school-wide instructional change. The situation is further aggravated by the tight budget position most school systems are in today. Schools cannot afford to concentrate resources in a single school because of the resentment that would be generated in the other schools. One way to move in this direction would be to employ funds obtained for experimentation in such a manner. Another would be to submit joint proposals to funding agencies with both teacher education and the improvement of instruction as dual responsibilities of the schools and the university. We have reached a plateau in the implementation of field-based programs. To move to a higher level requires additional effort on the part of both parties.

Integration of Methods and Student Teaching

Our experience in the Indiana TTT Program has led us to conclude that methods and student teaching can be satisfactorily integrated in a single program and that many values are to be gained in doing so. We therefore recommend that more universities experiment with various formats for bringing this integration about.

When methods courses are offered separately from student teaching, there is no opportunity to hold methods instructors accountable for how a student performs as a teacher. In all but the rarest of instances, there is little or no contact between the student and the methods instructor after the methods course has been completed. An integrated program provides the professor with an opportunity to follow through on methods instruction and to observe the results in pragmatic terms. Similarly, the student can return to the professor for guidance and suggestions before or after implementing an idea in his own teaching. He also has the benefit of additional supervision and feedback during the process.

Offering methods inside public schools was considered useful by public school teachers in the TTT Program. In response to a survey item in 1970, sixty-seven percent checked above the midpoint on a scale ranging from "location is of no importance" on one end to "forces instructor to be more practical and relevant on the other." In contrast, only 16 percent checked below the midpoint or toward the "no importance" end of the scale. Of course, offering methods in a public school location does not guarantee improved quality or increased relevance in instruction. However, the physical proximity of pupils, principals, teachers, and school materials is a factor that student teachers will not permit university instructors to ignore. The *location* of methods instruction is important, not because it insures instructional innovation, but because it opens the instructors up to ceaseless suggestions and concerns from individuals–teachers, student teachers, and school pupils–who did not communicate previously with methods instructors, especially during methods instruction.

School of Education isolation is dispelled when university classes are conducted in public school classrooms. Exchanges of opinions and techniques are greatly increased just because teachers and professors see each other daily in rooms, corridors, lounges, and offices. Field-based programs automatically imply new communications networks. They also require organizational structures where super-ordinate-subordinate relationships are discarded in favor of peer teams and task forces operating in an atmosphere of informality. Integration is not a panacea, of course, and it has some difficulties associated with it, but on balance, it offers an interesting opportunity for all of the parties to learn from the experience, knowledge, and perspectives of the others.

Institutionalization

Further thought should be given to the concept of institutionalizing experimental programs in teacher education. Current thinking assumes that experimental programs are initiated and continued for a relatively brief trial period on a combination of grant and local funds. The granting agency performs a pump priming function for what are presumably high risk programs. When the programs have become established, the granting agencies assume that local budgets will be sufficient to continue them. Once the pump is primed, the well produces its own water.

The pump priming paradigm has a major problem associated with it. It assumes that a permanent and perhaps expandable supply of potable water (money) exists at the local site, and that may not be true at all. When it is not true, one of two things happens. Either the program is abandoned altogether at the end of the experimental period, which apparently happened to many Ford Foundation supported projects in teacher education,[1] or it is modified enough to continue within the framework of support usually available at the local level. In such a situation, the program tends to regress to something more nearly like the conventional program. In other words, it loses some of the characteristics that made it unique as a program. This is particularly true of a field-based program such as TTT, where many of the additional costs are built into doing business in the field. In summary, neither of these results is very desirable. The last emasculates the program and the first eliminates it.

If one views improved programs as a desirable goal of experimentation, the most appropriate thing that could happen at the end of the grant period is that the program would be supported to continue in a form representing the most significant variation from the norm which objective evidence warrants. There is no question, of course, that the evidence would have to balance gains against costs. Perhaps an integrated program of methods and student teaching offers only a small increment in performance, satisfaction, or whatever, in relation to its human, material, and monetary costs. In that event, then and only then is it reasonable to choose between modifying the program and abandoning it altogether.

Most such decisions are made almost exclusively with budget considerations in mind.

To avoid these and allied difficulties we recommend that local agencies carry out a systematic examination of the costs and benefits of each experimental program at a predetermined point in the experimental period, preferably before the grant is terminated. A report based upon this examination would specify the ways in which the program was to be institutionalized and how the costs were to be absorbed by the local agencies. It would also compare the costs and benefits of the new program with costs and benefits in the conventional program. If granting agencies wished to reinforce this idea, they could require the submission of such reports before announcing funds for a transitional period culminating in institutionalization. In other words, they could build their funding patterns around the stages of a program's development and transition to an institutionalized form.

Conclusion

Concluding this book has special significance for us. It is the end of a long journey spanning several months of effort. It has not been an easy task to sift through the mountain of TTT experience and separate the events and activities that have general meaning from those of personal value or little value at all. We are not even sure we have succeeded in that task. But it is finished and there is satisfaction in that.

Another even more important journey has ended—a journey that began six years ago. Writing this book is the last significant act that we will perform together as Indiana TTT. While most of the operational programs continue, they are not under the TTT banner any longer, and that is just as well. The individuals now involved in each program have their own plans and purposes and they will continue stirring the pot of teacher education.

Fortunately, most conclusions are not just endings; they are freeing experiences as well. They free us from the past—from successes and failures—and point us toward the future. They may not free us from all of the pain and frustration we have experienced, but even pain and frustration can lead to a better understanding of ourselves and others, to sharpened judgments and wiser actions. They need not free us from friendships acquired, from what we have learned, or from new opportunities to reinvest our learnings at other times and in other places.

The stirrings in teacher education will continue—of that we are confident. Perhaps the recommendations we have made will enrich the batter, give it a little more zest or a little more tang. One or two recommendations taken seriously and acted upon constructively will be enough to sustain the ideas and activities begun by TTT at both the national and local levels. We may follow through on some of them ourselves, but we sure would feel better about it if someone out there would join us.

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Appendix

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